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ABSTRACT

In 1992, the SouthEastern Regional Vision for Education (SERVE) began a 3-year research-and-development effort to support four schools and two school districts in the southeastern United States in their implementation of Total Quality Management (TQM) processes. This document describes the experiences and perceptions of the participating educators. Following the introduction, chapter 2 introduces the main concepts of Total Quality Management. Chapter 3 describes the experiences of each of the pilot sites and offers a framework for systemic reform, although there is no one correct way to implement TQM. The fourth chapter presents findings of an independent evaluation of the pilot sites' implementation of TQM strategies. Data derived from focus-group and individual interviews suggest that the keys to a total-quality school include: (1) a committed and supportive leader; (2) a faculty that is open to change; (3) time for training; (4) the inclusion of all faculty in an orientation; and (5) the recognition that TQM requires a long-term commitment. Other TQM resources and efforts in the Southeast are listed. The appendix contains descriptions of TQM pilot sites. One figure and one table are included. (Contains 15 references.) (LMI)

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Total Quality Management: Passing Fad or "The Real Thing"?

An Implementation Study

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SouthEastern Regional Vision for Education

EA 027 294

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Total Quality Management: Passing Fad or "The Real Thing"?

An Implementation Study

SERVE
SouthEastern Regional Vision for Education

Associated with the School of Education,
University of North Carolina at Greensboro

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About the SERVE Laboratory

SERVE, the SouthEastern Regional Vision for Education, is a coalition of educators, business leaders, governors, and policymakers who are seeking comprehensive and lasting improvement in education in Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. The name of the Laboratory reflects a commitment to creating a shared vision of the future of education in the Southeast.

The mission of SERVE is to provide leadership, support, and research to assist state and local efforts in improving educational outcomes, especially for at-risk and rural students. Laboratory goals are to address critical issues in the region, work as a catalyst for positive change, serve as a broker of exemplary research and practice, and become an invaluable source of information for individuals working to promote systemic educational improvement.

Collaboration and networking are at the heart of SERVE's mission; the laboratory's structure is itself a model of collaboration. The laboratory has four offices in the region to better serve the needs of state and local education stakeholders. SERVE's Greensboro office manages a variety of research and development projects that meet regional needs for the development of new products, services and information about emerging issues. The development of this manual was funded through such an R&D effort. The laboratory's information office is located in Tallahassee. Field services offices are located in Atlanta, Greensboro, Tallahassee, and on the campus of Delta State University in Cleveland, Mississippi.

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Carlos Sasse, Community Partner
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Connie Pfaender, Teacher
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Wendy McColskey, SERVE's Research Manager, visited with all sites, managed the R&D effort, and conceptualized and authored the report. However, the report was a true collaborative effort.

Gabriel Massaro, one of the Westat trainers for the four school sites, contributed sections of Chapters 1 and 2. Dave Bayless of Bayless Associates contributed significant editing suggestions. In addition, Nancy Roche and Gabriel Massaro of Westat, Dave Bayless of Bayless Associates, and Betty Fry and Charles Ahearn from the SERVE Tallahassee office all spent a productive day with the author fleshing out the details of an early draft.

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CHAPTER 1

Introduction

Change is a constant throughout life. Today, more than ever, the world is immersed in change. Consider that many of the items we take for granted, from antibiotics to lap-top computers and fax machines, are relatively new. Organizations are also responding to the changing environment. They need management structures that allow them to be sensitive and responsive to these changes. Rather than rigid, authoritarian management structures, many are adapting more flexible, team-based, less hierarchical management structures that can effectively and quickly meet customer or client needs. This less rigid, hierarchical approach to management is embodied in the philosophy, principles and tools of Total Quality Management (TQM), based on the work of W. Edwards Deming and others.

SERVE Research and Development Project

TQM has been adopted on a large scale by business and industry. This management approach may also hold promise for the continuous improvement of the quality of educational services. In 1992, to learn more about what TQM might have to offer schools, the SouthEastern Regional Vision for Education (SERVE) began a three-year research and development effort to support four schools and two school districts in the Southeast in exploring, adapting and implementing Total Quality Management. The purpose of this document is to describe the experiences and the perceptions of the educators involved. In addition, writing the document has provided all those involved with a chance to look back and articulate the outcomes of this initial TQM implementation effort and to summarize some important issues for others.

Key questions addressed are:

- What does the implementation of TQM look like in different contexts?
- What do educators who have applied TQM have to say about the experience?
- What are some of the perceived benefits of applying TQM?
- What are some of the factors that should be considered in deciding whether and how to implement TQM?

The publication is a collaboration among SERVE Research and Development staff, TQM consultants at Bayless Associates and Westat, evaluators (Simmons, Boyle, and Associates), and educators at the six sites:

Deer Lake Middle School, Leon County School District, Tallahassee, Florida

Gulf Shores Middle School, Baldwin County School System, Gulf Shores, Alabama

Magnolia Junior High, Moss Point School District, Moss Point, Mississippi

W. Fred Scott Elementary School, Thomasville City School District, Thomasville, Georgia

Rock Hill School District Three, Rock Hill, South Carolina

Johnston County School District, Johnston County, North Carolina

Description of the chapter content

After a brief introduction in Chapter 2 to the main ideas of TQM, the experiences of the pilot sites, one each in the six southeastern states in SERVE's region, are described in Chapter 3. TQM is about how to manage change in a way that empowers faculty, students, and parents, and ultimately, leads to the continuous improvement of all programs, departments, units, and individuals in the organization. It offers a framework for systemic reform. However, there is no one way to implement TQM.

Each site comes to understand for their particular context what the best approach would be. As the six stories summarized briefly in Chapter 3 (and more fully in the Appendix) demonstrate, there are multiple roads to the application of TQM. A school with a well-functioning school improvement team is at a different starting place than a school with a faculty set in their ways or a brand new school with faculty who have never worked together. Implementing TQM district wide in a small community brings different challenges and opportunities compared with implementation in a large district with large schools. Some schools may get off to a fast start, others a slow start. Others start with great leadership commitment and then, with a change in leadership, find themselves in a period of ambiguous leadership commitment.

In addition to describing how the approach to implementation unfolded at each of the six sites, SERVE explored commonalities in understandings about TQM and perceptions of implementation and impact. In 1994, SERVE commissioned an independent research firm, Simmons, Boyle and Associates, Inc. (SB&A) of Chapel Hill, North Carolina, to conduct a comprehensive, qualitative study of TQM implementation at the pilot sites. It was the task of SB&A to collect data on the perceptions of school stakeholders who were both directly and indirectly involved with TQM at the pilot sites, and to capture their collective wisdom identifying factors relevant to implementation of TQM. Chapter 4 describes the themes that emerged from the focus groups, amplified by verbatim comments.

Too often in education, decisions to try new programs are made without first examining whether the approach is a good fit with the current needs and resources of the school or district. In the last chapter, there is a discusssion of issues involved in implementation that might help others in determining if TQM holds promise for their particular context, in planning for implementation, or in improving existing TQM efforts.

Other TQM resources and efforts in the Southeast

This publication is not intended as a "how-to" guide, but as a window onto the experiences of the six SERVE pilot sites. Many "how-to" resources on TQM do exist. One "how-to" handbook for school or project improvement teams, (based in part on the experience of David Bayless (Bayless Associates), Gabriel Massaro and Nancy Roche (Westat), and the trainers/facilitators for the four SERVE school project sites), is referenced below. This resource is referenced frequently in Chapter 2.

Team Handbook for Educators (How to Use Teams to Improve Quality)

By Peter Scholtes, David Bayless, Gabriel Massaro, and Nancy Roche

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3800 Regent Street
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For those more interested in a "how-to" guide specifically targeted at implementation at the district level, a guide for local education

reform leaders is available in draft form from the North Carolina Quality Leadership Foundation. This organization administers the Malcolm Baldrige Awards for Excellence in the state and is interested in helping districts assess themselves relative to specific criteria for organizational excellence.

Roadmap for Quality Transformation in Education

By Andy Frazier
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We are also aware that several states have organizations (funded by corporate partners) which are taking leadership roles in providing support in the form of sponsorship, networking, publications and/or training for schools and districts interested in implementing TQM. Two of these programs are described below.

The North Carolina Business Committee for Education is an organization of over 100 key businesses in North Carolina who share a common desire for the systemic improvement of the public schools. The organization is active in several areas (e.g., workforce preparedness planning) but of relevance here is its significant partnership and sponsorship of seven school systems and their business and university partners who have embarked on a journey towards quality in education.

This partnership/sponsorship effort was initiated in 1993 by the state's governor, Jim Hunt. The organization has established a Quality Schools Steering Committee that leads and guides this three-year pilot effort. The organization has an executive director who has become a point of contact for North Carolina Schools interested in TQM. Nearly one-third of the state's school systems have contacted the director for information about TQM in the past year.

The organization believes that if the Quality Schools Program is to evolve as a local model for the improvement of public education in North Carolina, the organization will need to lead an effort to develop strategies for ongoing support and expansion. To date, the organization has raised more than $2.1 million in contributions, cash, and in-kind support for the implementation efforts of the seven pilot school districts. They hope to raise an additional $1.8 million for the full implementation of the three- year pilot Quality Schools Program.

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In Alabama, the Alabama Power Foundation, Protective Life Corporation, Russell Corporation, and the Economic Development Partnership of Alabama are currently funding a program called Quality Education at Samford University's School of Education. As of January 1995, over 1,000 educators in 50 schools had been trained in Total Quality Management concepts by the Samford program. The program literature states that

> *Total Quality Education is an instrument of change, providing the mechanism to manage schools more effectively and to significantly increase student learning. Administrators, teachers, students, parents, and community members will be trained to use quality improvement methods to identify and solve problems, use data to study processes, and continuously and rigorously improve every system.*

Services offered by the program include three-day beginning training workshops for school teams, subsequent training for system facilitators, and networking conferences for participating schools. In subsequent years, the program will develop TQM training and support materials for dissemination.

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These examples demonstrate that support from the business community for the application of Total Quality Management to education is vital and that significant training and implementation efforts are underway in several states. These efforts in North Carolina and Alabama represent significant partnerships of the business, university, and public education communities. These organizations are building grass roots support for a quality approach to education by offering leadership, resources and encouragement to schools and districts who choose to adopt a continuous improvement philosophy. Educators in the SERVE pilot sites have said repeatedly they are tired of "quick fix" approaches that purportedly make schools better once and for all. They see the value of a long-term, continual improvement approach to change. But it is a mindset or attitude that takes time and hard work and thus, benefits from both the tangible and intangible aspects of support offered by organizations such as those described. For those educators who see TQM as the next quick fix for education, consider these comments from two educators in the SERVE TQM project.

> *There are some schools and school systems that I know have gone into quality management and thrown it out at about a two-year point because they saw it as a program that you pick up and put in. You go through ten steps and everything's fixed. And that's not what this is. It's a whole belief system, it's a philosophy, and, as I see it, it's almost a maturing, growth kind of process.*

> *In listening to what businesses have said, even after ten years, some of them feel that they are a three on a scale of ten. You constantly have to remind yourself not to give up. It's going to have to be a constant, incremental movement toward quality. You don't have a bottom line approach to it.*

CHAPTER 2

An Overview of Total Quality Management

Total Quality Management is not new. Since the 1950s, it has been used widely in Japan, based on the influence of Dr. W. Edwards Deming and others. The success of TQM in Japan drew the attention of this country's corporate players. Bonstingl (1992) describes a 1980 NBC documentary entitled "If Japan Can, Why Can't We?" as the beginning of efforts to apply TQM in the United States.

The program focused on the work Deming had done in Japan, and the ways his teachings had helped the postwar Japanese economy to rebuild with dedication to quality and continuous improvement. The morning after the broadcast, Deming's phone began to ring off the hook as Ford, General Motors, and a host of other American companies sought his help, immediately if not sooner (pg. 18).

This interest in TQM among business and industry has continued throughout the 1980s and 1990s. However, the application of TQM to educational organizations is relatively new. Many of the districts who are considered leaders in managing improvement within a TQM framework began their efforts in the late 1980s and early 1990s (Frazier, In Press). As an indicator of interest in this approach, over 1,000 administrators have joined the American Association of School Administrator's Total Quality Network (A.A.S.A., 1801 N. Moore., Arlington, VA, 22209).

This chapter provides a brief introduction to the concepts and principles of TQM.

TQM and Site-Based Management: A Good Fit

Embedded in much of the recent literature about school reform is the concept of site-based management. Until the advent of site-based decision making, many schools and districts had top-down, hierarchical management structures that had limitations given the importance of staff buy-in and commitment when school improvement is attempted. Recent changes in many states have given local school districts more flexibility and authority to affect public education. Consequently, it is critical that schools and districts equip themselves to handle the increased responsibility.

In a recent study of the implementation of site-based management (SBM) in 12 schools, Hatry et al (1993) define SBM.

Under SBM, individual schools, their teachers, parents, and sometimes others (such as students, non-instructional personnel, and community representatives) are given increased authority over one or more responsibilities, including the school budget, curriculum and instruction, and school staffing. The basic hypothesis is that such decentralization to the school level will stimulate organizational renewal, strengthen school-wide planning, raise the morale

and motivation of school staff, stimulate instructional improvement or innovations, foster development of characteristics associated with effective schools, and improve student achievement (pg. 195).

As implied by this quote, SBM is not about decentralization of all functions to the school level, but a matter of finding the proper balance between those functions that are best performed when centralized (i.e., transportation, purchasing) and those best performed at the school level. Carl Glickman (1993), the director of the League of Professional Schools, a collaboration of over 60 schools in Georgia committed to site-based management and school improvement, categorizes the kinds of school decision-making that have occurred with SBM:

- **Zero-impact** kinds of decisions include those about parking spaces and bus duties.
- **Minimal** impact decisions include discipline policies, parent programs, and in-service days.
- **Core** impact decisions have to do with curriculum, staff development, peer coaching, and student assessment.
- **Comprehensive** impact decisions include those about school budget, hiring, staff assignments, and personnel evaluations.

Glickman (1993) suggests that too much time spent on zero or minimal impact decisions may cause a school to lose sight of its purpose. He also suggests that total control over comprehensive impact decisions may not help a school improve if it has not first worked through the core impact decisions about curriculum, student assessment, and staff development. Thus, the kinds of decisions a school chooses to focus on are critical to the school improvement process. A second aspect of decision-making is the quality of decisions made. TQM can lead to improvements in both the kinds and quality of decisions made.

Several states in the Southeast have actively encouraged site-based management through legislation and policy initiatives requiring the formation of school improvement councils. The North Carolina Department of Public Instruction has been studying the success of SBM efforts in the state. SERVE has helped fund a second phase of the original study, which will become a SERVE report. However, the findings of the initial study are relevant here (Special Report (1994): Site-Based Management in North Carolina, North Carolina Department of Public Instruction).

In a survey mailed to 3,000 principals, teachers, and parents, more than 60 percent of all three groups had a favorable impression of site-based management. However, only half of the teachers and 60 percent of the principals felt prepared to effectively participate on a site-based team. In addition, only about half of the teachers indicated that they felt that SBM had been effectively implemented at their school.

Subsequent focus groups throughout the state identified some of the problem areas.

- There was a perception that important decisions had been made at higher levels and handed down in traditional top-down management style leaving schools with few or no meaningful decisions to make which might impact student performance.
- Respondents expressed a need for better understanding of the structure and processes involved in making site-based management work. For many, it seemed to be a term in search of a framework.
- Another theme expressed was a lack of preparation by previous training or leadership experience to effectively manage or participate in a site-based management structure.

The first problem with SBM implementation points to the importance with any attempt to change the power structure for those in power to buy-in to giving up power. This commitment to trust decision-making to those with responsibility for doing the work is a require-

ment for both site-based management and Total Quality approaches.

The second identified barrier points out that site-based management stresses the importance of local control over important decisions but that just saying that the locus of decision-making needs to change isn't enough. Guidance about issues that need to be considered in making this happen is needed. TQM can provide a guiding framework through its emphasis on continuous improvement, effective teamwork, data-based decision-making, and analysis from a process and whole system perspective. The components represent a vision for what management under SBM might look like and a common language for a district to use across schools. District leaders can be proactive rather than reactive about what SBM means in their setting.

It should be noted that TQM is not the only framework for SBM. Others articulate similar components but name or organize them differently. For example, Glickman (1993) provides a school renewal framework that includes: a written covenant (agreed upon principles of learning that provide a consistency of purpose), a charter (in the form of a constitution which specifies how staff will be involved in the governance process at the school), and the critical-study process (a systematic way of collecting data and reviewing progress). However, TQM has the advantage of being a framework that is understood by the business community.

As the third finding suggests, training is a major issue in SBM. Educators traditionally have not been trained to work in teams, resolve conflicts, collect data, and analyze organizational strengths and weaknesses. Thus, there is a clear need for exposure to management approaches such as TQM and training in new skills (teamwork, data analysis) that will help educators use their new power effectively to improve student learning.

The rest of this chapter describes the Total Quality framework for managing improvement in an organization. It is important to point out that some schools or districts which have been involved in site-based management for awhile may have evolved into management approaches that match the TQM philosophy without calling their approach TQM. In these cases, learning more about TQM may provide validation and language for a management approach already in place.

Problems with Managing by Results

Regardless of who is making decisions, management style can be examined in light of whether the focus is on delivering quality services to students (improving the learning process) or on higher outputs (test scores) with little discussions about the way in which students experience the work they do in schools. In the era of accountability, the most typical approach to managing school improvement has been management by results. The visibility and emphasis on state-mandated tests has increased dramatically (Bond, 1994). Because state-mandated test scores are publicly reported and often the basis for accreditation, all but the highest scoring districts are under pressure to improve their averages.

In a recent SERVE policy report (*A New Framework for State Accountability Systems*) that looked at the impact of state accountability systems, the author argues that trying to force improvement by embarrassing districts with low scores is not working. These districts typically respond with defeat, low morale, and paralysis and they tend to face a whole range of social, economic, and health problems that can not easily be remedied to produce higher test scores. Rather, they need a commitment to long-term, incremental improvement in the quality of services.

Because of the power of state testing programs, schools often focus their improvement efforts solely on raising these scores. The weakness of this approach is that it often leads to short-term, superficial improvement efforts (e.g., improve students' test-taking skills) rather than in-depth analysis of the real strengths and weaknesses of the organizational processes and programs.

In *The Team Handbook for Educators*, Scholtes et al (1994) outline some of the problems of this focus on results (i.e., raising test scores):

- Looking good begins to take precedence over long-term organizational health. The pressure to raise test scores can demoralize both teachers and students who feel they are doing the best they can.
- Fear of failure and paralysis in regard to change can emerge. Faculty may become overly controlling in their relationships with students. They may be fearful of taking any chances or of trying anything new in the classroom for fear scores will go down further.
- The results emphasis leads to a focus on controlling or forcing learning rather than facilitating learning. Thus, students are seen as obstacles, rather than as partners. The needs of students and the community take a back seat to the need for higher test scores.

TQM: An Alternative to Managing by Results

Applying TQM to education suggests that student outcomes are improved by working on processes that impact the learning environment of the school. The purpose becomes one of providing teaching and learning processes that meet or exceed the quality standards of the community, not of providing a teaching and learning service that results in higher test scores regardless of the amount of real learning and motivation that occurs. The goal is to study and improve every aspect of the school system's processes, not just add a program because it might improve test scores.

In *The Team Handbook for Educators*, Scholtes et al (1994) use a triangle concept to show the main components of the TQM approach. The three corners are described as follows (pp. 1-4).

One corner represents quality as defined by the customer, for that is where the new focus must be. In the context of an education process, the translation of the concept of "customer" is complex and is related at each level of the system—classroom, school, district office, and community—to the particular process with which the person's work is associated. It is crucial to remember that the product is the education that students receive, not the students themselves.

A second corner of the triangle represents the scientific or data-based approach to studying processes, a strategy that leads to long-lasting, fundamental improvements. The third corner represents everyone working together all as one team to learn how to apply these principles. These three function as a three-legged stool: when they function together, they are exceedingly stable. When even one element is missing, the result is disaster. Each must be linked to the others for the success of all.

Although various authors treat TQM in a slightly different manner, there are some common themes which are described briefly below. The TQM themes are very consistent with themes from the Effective Schools literature.

The kinship between W. Edwards Deming's operational philosophy of management (TQM) and the basic operational tenets of the effective schools movement is truly striking. Both represent a bundle of proven management principles and associated implementation processes which, when properly implemented, result in significant improvement in valued organizational aims (Lezotte, pg. 5, Creating the Total Quality Effective School).

1. A primary focus on customer satisfaction.

The idea of customer satisfaction as a driving force is central to quality management. A focus on actively working to examine and meet the

needs of customers may be a novel idea for many schools and districts which have been organized around values of efficiency, standardization, and control rather than responsiveness. Although the concept of "customer" can mean different things to different people, one interpretation of external customers in an educational setting are those who depend on the successfully educated student (business, higher education, and the community). In this definition, students and parents are partners with schools in developing students to the point that they satisfy external customers. Part of the process of creating a customer focus in a school or district might be to develop or improve relationships with business, higher education, and the community in general and begin dialogues with these external customers about the kind of skills needed by graduates.

In addition to external customers, it is helpful to think about internal customers, those persons who are next in line to receive your work. For example, each grade level is a customer of preceding grade levels. Thus, a goal might be to improve the communication between grade levels, departments, or feeder schools. A quote worth thinking about in this regard is:

Education is not something that goes on in isolated classrooms, but in schools. What ultimately matters is not what one teacher gives to one group of students at one point in time but what students acquire over twelve or thirteen years, as they pass back and forth between classrooms and from grade to grade and building to building. What ultimately matters is how each teacher's efforts fit together with the efforts of others (Shedd and Bacharach, 1991).

Finally, customers can be thought of as they relate to specific services. For example, school principals are customers of the superintendent's leadership, direction, and assistance. The customer for student report cards are parents, other school personnel, and students. In particular improvement efforts, discussions about who the customer will be, how they might be involved in the improvement process, and what their needs are can be extremely beneficial. The glue that holds all the discussions together are the shared beliefs about goals and purposes.

2. Constant dedication to a philosophy of continuous improvement.

This component has several related threads. First, there is a realization that change or improvement is typically incremental, not immediate and visible to all. Change evolves through better understanding and understanding evolves through conversations and discussions. In a SERVE report (1994) entitled *Overcoming Barriers to School Reform in the Southeast*, stop and start reform is identified as a barrier to effective school reform at the state level. As one teacher who participated in this study noted:

> *The stop/start approach to reform really works against finding out what works and what doesn't. We throw out an effective old program in favor of an untested new one... Thus, 10 years after the reforms began, teachers and administrators are understandably "improvement weary" of abrupt shifts in policy initiatives. As one central office staff member put it, 'A this too shall pass' mentality is too common.*

The answer for start/stop reform is for a leader to commit to a continuous improvement philosophy. As problems are identified and reforms are attempted, these reforms should be evaluated and continuously refined, improved, or rethought. In this cyclical improvement process, teams learn to make decisions based on research and data, rather than just hunches, to look for root causes of problems rather than react to superficial symptoms, and to seek long-term, meaningful changes to the system rather than quick fixes. Leaders can signal their commitment to the value of continuous improvement in a variety of ways (visible, active participation with improvement teams, providing resources and incentives for team meetings and data collection, walking the talk, etc.).

3. Establishing the process of continuous improvement (PDCA).

In TQM terms, the Plan-Do-Check-Act (PDCA) Cycle is the workhorse of improvement efforts. Improvement depends on the evaluation and modification of processes. A process is a sequence of tasks. For example, developing a lesson plan is a process (with a sequence of steps leading to the product). While most people think of planning as something that takes place before a new process is initiated, it can be more generally thought of as any idea that might improve a process. A plan can be developed relative to an existing policy or program. Plans to change processes should reflect a belief that the change represents a more effective way of fulfilling the school/district mission. Customer needs and other data should be considered in developing plans.

Before the plan is activated (Do), some thought should be given to the kinds of information or data that will be collected to determine how well the plan is being implemented. As the plan is implemented, data are gathered to inform future modifications. This evaluation (Check) may reveal successful implementation, or more likely, implementation with some problems. A lack of data collection at implementation is why many educators feel at the mercy of the newest "fad."

Depending on the evaluated success of the monitored process, revisions might need to be made (Act). The process has come full circle and is at the plan (Plan) stage again. Improvement of programs and processes is a never-ending cycle that should not be considered a burden, but part of the natural process of organizational improvement.

It should also be mentioned that as teams work through this cycle, TQM suggests using a variety of management tools such as flow charts, cause-effect diagrams, data tables, and check sheets (Scholtes et al, 1994) that help in focusing discussions and understanding the problem or initiative under study. In addition to these management tools, Scholtes et al (1994) describe tools for making teamwork more productive (brainstorming, multivoting, developing consensus, nominal group techniques). Tools for conflict resolution and planning effective meetings can also be found.

4. Understanding how the parts of the system fit together.

One way of looking at what goes on in schools is that every activity is part of a larger process. The school is a dynamic system of interrelated processes (e.g., hiring, mentoring, evaluating new staff; providing professional development opportunities for tenured staff; developing the curriculum; grading students; reporting progress to parents; handling discipline problems, etc.). Each process should be identified and continuously improved.

Better processes mean better quality and improved learning environments, which mean longer-lasting improvements that result in better-educated students. When people begin to look at processes, they will, often for the first time, develop a unified language and understanding of what their roles are. Someone can talk about specific steps in a process, and everyone will understand where those steps fit into the larger picture. (Scholtes, et al., 1994, pg. 2-2).

Getting teachers and others talking about processes unites them in a common endeavor. Teaching a class is a system that involves many interrelated processes (e.g., setting goals, developing a lesson plan, developing assessments including questioning strategies). All of the processes involved in teaching are interrelated. It is hard to change goals without also changing instructional methods and assessments. When a whole system is working well together, it might be called aligned and/or optimized. Processes and systems allow teachers in a school to see the big picture of how their classes are similar or different and ultimately, how all their efforts fit together toward achieving a common vision of student success.

It is also important to emphasize the word "total" in total quality. Quality is a criterion that can be applied to everything the organization does, so that striving for quality becomes a

daily effort both in the classroom and out. It encompasses everything from holding quality team meetings to quality communications with parents to quality in terms of school cleanliness. Establishing a quality culture is gradual and happens in conversations, modeling, and being open and asking for feedback.

5. Effective use of teams and employee involvement.

While all individuals bear a responsibility to work on improvements, TQM recognizes the value of using a team approach to problem-solving. Gains in quality can result from the pooling of ideas, expertise, skills, knowledge, and approaches that teams bring to the table. A second outcome of a team approach is the support, understanding, and commitment that often results from teams working together. "*As a spirit of teamwork invades the educational system, people everywhere will begin working together towards quality—no barriers, no factions, "all one team" moving together in the same direction*" (Scholtes, pg. 2-11).

Moving from a highly individualistic or competitive culture to a cooperative, team-oriented culture may not happen overnight. Staff need training and time to work together on projects. A key aspect of TQM implementation centers on providing teacher training and opportunities (time) to work cooperatively in teams on problems and improvements.

6. Quality leadership.

Leading involves two fundamental processes: "*getting followers to value particular goals and helping them identify the means for attaining the goals*" (Ames & Ames, 1993, pg. 1133).

"*It has become more and more common to read and hear that the essential factor underlying effective schools is an "ethos" or "culture" of excellence, and that effective school leaders are culture builders*" (Sashkin & Sashkin, 1993, pg. 100). Culture is often thought of as the values, goals, and meaning of the organization that its members share.

According to Scholtes, the most frequent cause of failure in any TQM effort is uninvolved or indifferent administrators. Staff, acting on its own, can not create a problem-solving, risk-taking, continuously improving culture. TQM encourages administrators to control and blame less, and support and facilitate more. They need to identify obstacles to successful work groups and ask themselves how staff feels about their work. They must constantly model sharing of power. A central office can "talk" TQM, but if in meetings they dictate rather than solicit input from principals, they aren't walking the talk. Similarly, if a principal is encouraging teachers to become facilitators of student learning in the classroom rather than authority figures, but in faculty meetings communicates by lecturing and laying down the law, then the principal is not walking the talk. It is the leader's responsibility to continuously model "asking for input."

It is the role of administration to maintain the focus on improving the quality of services, rather than on simply raising test scores. An administrator that agrees to allow the science department to try a new curriculum but with the warning that if state test scores go down, the new approach will be ditched, is not supporting quality improvement, but rather management by fear. It is the role of administration to drive out fear. In a TQM approach to leadership, administrators encourage creative thinking, risk-taking, work in self-directed teams, and a culture in which there is mutual support for everyone's continuous improvement, which ultimately leads to better results.

Changes in leadership are a fact of life at all levels of the educational enterprise. These changes contribute to "start-stop" reform. There is little a school system can do about constant changes in leadership. However, school districts could have in place a system that allows reforms such as TQM to continue to develop. If a school board is knowledgeable and supportive of TQM, if a well-thought out development process is articulated and agreed upon, and if a critical mass of staff are trained and providing leadership, then, perhaps changes in superintendents will have less impact on the implementation process.

7. An improvement versus "gotcha" culture for students.

The six aspects of TQM described above demonstrate an approach to the organizational management of change, through problem-solving teams led by a supportive leader. TQM as applied in most organizations is an invitation to think differently about the management structures and the relationships between managers and staff. In education, it is also an invitation to think differently about the relationships between teachers and students. Teachers' instructional and assessment practices, in part, determine the culture of the classroom. Are teachers' relationships with students characterized more by controlling, threatening, ranking, and punishing or supporting, helping, and coaching? Can the classroom learning environment become one where student input, choice, and self-evaluation are commonplace?

As Bonstingl (1992, pg. 29) has put it:

It baffles me that the process of learning in today's classrooms so infrequently includes reflection by teachers and students on the optimization of the learning they do together. The routine is always the same: Begin the unit, teach the unit, give the students a test, correct the test, return the test, review the "right" answers with the class, collect the tests, and record the grades. Then move on to the next unit. If we continue this practice, how will students learn to use experiences from past units to improve the work they do on future units? To help students engage in constant improvement, we must make the teacher-student learning system the focal point of instruction so that the way teachers and students interact in the learning process can be continually fine-tuned.

As a well-known researcher in student motivation has said: "*The sine qua non by which school reform must be judged is a transformation of the culture of the school that will lead to enhanced student motivation and learning*" (Maehr & Buck, 1993, pg. 53). Other researchers (Ames and Ames, 1993, pg. 129) go on to describe that culture:

Our work suggests that there is a normative or ideal motivational state for the school learning environment. We call this environment mastery oriented. Whether student, teacher, or parent, when an individual is mastery oriented, he or she is focused on the process of learning as it relates to new skills and improving his or her own level of competence or skill. Underlying this mastery orientation is a belief that effort will lead to progress and learning. In a mastery-oriented environment, the emphasis is placed on working hard, taking on challenges, learning new things, and making progress. Value is placed on learning and it is understood that the pursuit of challenging goals involves making mistakes along the way. When mistakes or problems are encountered, problem-solving strategies are enacted and the goal-striving efforts are maintained.

More often, even though all schools talk as if learning by all students is a primary goal, student management, instructional, and assessment practices are carried out in such a way that students are likely to fear failure and view the school culture as a contest to see who is the best and that being better gives higher status.

The last common theme found in educational writings about TQM is that how teachers manage the student management (discipline), learning, and assessment processes in their classrooms and how schools label their students as successful or unsuccessful may be the most promising application for Total Quality Management. The TQM philosophy of continual improvement and employee involvement, when applied to students, should lead faculty to a real consideration of the consequences of their approaches to discipline, teaching, and assigning and grading student work. One must ask if faculty interactions with students in the classroom support a life-long "yearning to learn" in students or lead to frustration and discouragement that precludes further learning.

These are some of the common themes of TQM. In supporting six sites in studying and applying these themes to their context, we hoped to inform others of what these applications look like. The next chapter summarizes the implementation efforts of the six SERVE pilot sites.

CHAPTER 3

Understanding Implementation

Descriptions of SERVE's TQM Pilot Sites

In the 1992-93 school year, four schools and two school systems were selected as SERVE-sponsored TQM pilots. Brief descriptions of the sites and their applications of Total Quality Management provide a context for consideration of the study findings in Chapter 4.

Description of the Six Site Contexts

SERVE selected one pilot site in each of its six southeastern states. Four schools, in close proximity, were identified who would work together with consultants from Bayless Associates and Westat. Two middle schools, one junior high school, and one elementary school, representing a range of demographics, were chosen based on interest. They volunteered to participate with little to no prior knowledge of TQM. The schools had the approval of district offices to participate in this pilot project but none of the districts were actively involved in implementing TQM district wide. Only one school/district had a history of site-based management and three of the schools had no operational school leadership or improvement team prior to the project. All four had an interest in developing a more participatory, school management approach.

In North and South Carolina, SERVE was aware of two districts who had leaders who were interested in TQM. Because of this demonstrated interest from the top leaders, SERVE contracted with these two districts to see what could be learned from efforts initiated from the district office.

All six sites received funding for three years to cover training or an outside facilitator, teacher release time, and travel costs associated with implementation.

Description of Training/ Facilitation Provided to the Sites

A key to successful TQM implementation mentioned by all SERVE sites was the recognition that TQM is complex enough that it can not be successfully implemented as a result of a stand-alone, one-shot, two- or three-day training program. Staff need opportunities to apply concepts and receive feedback and support on a regular basis. All of the pilot sites recognized that implementing TQM required ongoing facilitation and support. Time for ongoing dialogue and thoughtful review and reflection were critical aspects of implementation. Because of the importance of learning by doing, all sites identified teams to participate in training and implementation efforts. These teams met regularly. In addition, the principals at all pilot sites were actively involved in the training process.

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Who was chosen to participate?

Teams from the four school sites were selected in a variety of ways. In some cases, the principal knew what area of improvement that they would like to target and thus, picked a team that would best handle the targeted area. In other cases, when there was no preconceived improvement focus, principals either selected a team or asked for volunteers. In most cases, teams were chosen that were representative of grade levels or subject areas. None of the four school teams were functioning prior to the project. In one school with a school improvement council, the team was not selected to participate, probably because the amount of its existing duties precluded the kind of commitment that would be required to study and apply TQM.

Both of the districts developed central office leadership teams who were the first to be trained. Subsequently, both districts elected to identify three pilot schools for participation. In Rock Hill, the three schools chosen were a feeder system (elementary, middle, high schools). In Johnston County, two middle schools and one elementary school were chosen by the central office to participate.

How was training/facilitation provided at the sites?

1. **Four school sites.** Under a contract with SERVE, training and ongoing facilitation for TQM teams from the four school pilot sites (AL, MS, FL, GA) was provided by a three-member team of Westat consultants, one having primary experience in industry and educational research, with the other two members of the consulting team having backgrounds as educators.

In the first year, the trainers met with the teams for one day each month and covered such topics as TQM philosophy, TQM tools (e.g., flow charts, data charts, etc.), curriculum development, and teaming skills (e.g., developing consensus, effective meetings, etc.).

The facilitator/trainers helped the teams select areas to study in the first year. As teams selected problem areas to study, they were able to use their SERVE funds to obtain supplemental training or consulting from other sources.

The four schools continued their relationship with their Westat facilitator team for the next two project years with the role changing somewhat. In the first year, the trainers set agendas in consultation with team members, provided reading materials, and decided on topics to cover. In subsequent years, the trainers/facilitators functioned more as support to the TQM teams, helping them analyze and interpret data. They also brought the four school teams together several times each year to share experiences, which helped to broaden understandings of school functioning and TQM.

2. **Johnston County School District, North Carolina.** The Johnston County, North Carolina school system selected a single consultant/ facilitator having a background in education to work with the district leadership team, all principals in the system, and the three pilot schools (which benefited from SERVE funding).

Prior to the first year of implementation, the three pilot school principals went through an intense week of TQM training with the consultant. They then introduced the need for the approach to the staff and identified ten school teams for which teachers could volunteer to participate. All faculty were encouraged to be involved. The consultant provided the basic TQM training (one day) to the teams. She also worked with the grade level teams during their planning periods. However, the thrust of the training was on TQM principles and beliefs, on planting the seed. Since the principals had received intensive training prior to the school team training, they facilitated the application process rather than the consultant.

In the second year, the consultant met once a month with all principals in the system and with the central office. During this year, the district changed superintendents which temporarily slowed the momentum of the efforts.

Under the new superintendent, the district changed consultants and entered into an agreement with Pinellas County Schools in Florida, a national leader in Total Quality Education, to provide training and guidance to all schools in the system. The leadership teams of the 27 schools in the district received three days of training from Pinellas County. The training was an overview rather than a facilitated "learning by doing" exercise.

Principals at the three pilot schools continued to facilitate the application of TQM to the work of their school teams. Linda Stevens, the principal at Smithfield Middle School, has developed a manual for her school teams to use entitled *Teaming: A guide for using teamwork in a quality school setting.* It has sections on team functioning in general, a description of the purpose and functions of the seven cross-functional teams established, a description of the goals and work of the grade level teams, and a description of an ideal team at work. Such leadership by the principal is critical if a total quality culture is to be established. Because TQM has many components to consider, it is difficult for a staff to implement the ideas subsequent to a several-day training session without some kind of support (either from internal resources or external facilitators).

In the summer of 1995, 50 teachers from the three pilot schools participated in a training session on the application of TQM to the classroom. These teachers will train the rest of the school staff in these kinds of applications, a conscious effort by the principals to give the staff ownership over their professional development. The principals also developed ongoing staff development plans so that new teachers are provided an orientation to teaming and quality.

3. **Rock Hill School District Three, South Carolina.** The TQM training effort in Rock Hill, South Carolina, started at the top with the superintendent and several staff attending training in TQM along with some businesses. After receiving SERVE funding, a second level of training began for the three school teams selected for the pilot phase.

Several days of training were provided by facilitator/trainers (The Gahagan-Jacobus Company in Columbia, South Carolina) who conceptualized a two-pronged training approach to understanding TQM: 1) tools and technology and 2) human relations skills. The human relations or people skills are critical because of the need for teams to work effectively together. The tools and technology help the teams to do their work more efficiently and effectively. This two-pronged training was very successful.

Subsequent to the training, central office staff, the trainer/facilitators, and others provided facilitation for ongoing team project meetings. A central office staff person was assigned to each of the pilot teams to help facilitate the initial meetings and to provide ongoing assistance. The support and connection with the central office remained constant and visible. In addition to the training for the pilot school teams, all principals in the system have subsequently been trained.

Besides supporting TQM at the three schools over the three-year period, a district-wide TQM steering team has evolved into a strategic planning team of 40 people. District-wide planning teams focused on six major areas (technology, school climate, safety, staff development, curriculum, and collaboration). Rather than continue on with extensive TQM training for teams from all schools, the district-wide staff development planning team is rethinking the staff development function so that new teachers, and then all teachers will have access to information needed to change the culture of the classroom. There has been a shift in emphasis from training faculty teams in TQM to providing opportunities for teachers to rethink the classroom culture towards one that is more empowering and inviting for students.

The district recently (1995) piloted a new teacher summer institute for 70 teachers entering the system which focused on ways to empower students (develop ownership), ways to assess students differently in ways that encourage success, and the importance of an

inviting classroom environment. This institute supports the kinds of culture changes that are the ultimate application of TQM concepts to the classroom. At some point, all teachers in the system will have access to the kind of training provided to new teachers. Through this mechanism, "good" teaching is defined and modeled for all teachers.

What did the teams do?

The process of continuous improvement is a simple one: plan (which involves identifying and studying problems, developing strategies and an evaluation plan); implement the strategies and monitor the implementation process; make revisions and improvements; collect more data; etc. Although the process is straight forward, it is time-consuming and does not easily fit into the tight time constraints of teaching schedules. SERVE funding helped to provide the "time" for teams to go through this cycle. As can be seen in comments in the next chapter, this experience was eye-opening. For example, two teachers commented:

A real big difference for me personally and professionally has been the use of a process, instead of just reacting out of my gut, which I think teachers have done forever.

All the years of testing and low scores in some areas, this is the first time I think we ever sat down and said, "Okay, why do they have low scores in this area?" and we find out from studying the problem that we don't teach what is tested.

Selecting a problem to study is not easy, especially given the need for team agreement and the lack of an established culture for talking publicly about "problems" and needed improvements. In some schools, the principal had a vision or "problem" in mind for the team to tackle and led the study process. In other cases, the choice was left up to the team.

Descriptions of the projects undertaken are more fully described in the Appendix. They range from a study of at-risk student success which led to a plan to reduce the level of tracking at the school to a classroom observation study of teachers' math questioning strategies. Another school studied and collected data on the effectiveness of a ten-year old Instructional Management System used by the district and another studied staff morale. An elementary school team studied the effectiveness of teacher-parent conferencing. These projects clearly were not superficial.

Summary of Implementation Across the Six Sites

There is no "right way" to implement TQM. Different contexts require different approaches but others can learn from the commonalities and differences in the implementation strategies used. We encourage the reader to learn more about implementation by reading the Appendix.

What were some commonalities among the sites?

The teams which were formed 1) met regularly, 2) needed initial leadership from inside (in some cases the principal) or outside the school (consultants, central office staff) to support them in applying the TQM process and tools; 3) collected data to inform decisions; 4) developed a common language centered around quality and a customer-focus; and 5) experienced faculty empowerment in the sense of opening up ownership for school functioning and success.

What were some differences between the sites?

Some school leaders are at a point where they are ready and willing to let go of power, others are more hesitant and vacillate between letting go and controlling. Some principals were ready for TQM because it provided a needed framework and set of beliefs that helped structure more faculty involvement in school decision-making. Other principals were ready for parts of TQM, such as the customer focus, but not for others, such as a systemic focus.

How teams were formed and how the whole faculty was involved and informed was different at every site reflecting the complexity of choices involved in these decisions. It is clear that in some schools, a "we-they" type of resentment developed because of how the initial TQM teams were selected and their special status. This whole issue of how all staff can be involved and/or informed at some level so that TQM is not owned by one team is a very important consideration for the continuity of the effort.

Another difference between the sites is how much of TQM has been built into the way the school operates and thus, has become part of the organizational structure and culture. Three of the four school sites had a change in principals in the three years. Both district sites experienced a change in superintendents during this time period. Obviously, the implementation process is made somewhat more difficult if this turnover occurs, especially to the degree that a new administrator has different beliefs about management and the kinds of issues that are appropriate for staff to study than the "old" administrator.

At another level, one might look at how many different teams were operating in the school and how effectively to produce customer satisfaction. A school which had grade level, curriculum, governance, and special services teams studying problem areas might be considered further along than a school which had only one team studying a special problem in a time-limited fashion. The more teams that operate, the more opportunity staff have to participate in the improvement process and develop common goals and beliefs.

Finally, the sites differ in terms of whether ongoing professional development efforts have been planned to continue to support discussions of quality components; that is, the degree to which ongoing professional development is being designed to continue opportunities for teachers to examine beliefs and values. For example, one district is piloting a district-wide new teacher institute, which although not built totally on TQM concepts, reflects the district's best thinking about good teaching practices, which emerged at least partially from their experiences with TQM.

Reflecting back on the previous chapter about the main components of TQM, few of the schools had effectively implemented *all* the aspects listed. However, each site has a story that illustrates the application of the components.

Customer-Focus

This component of TQM is demonstrated by actions at several sites. At Gulf Shores Middle School in Gulf Shores, Alabama, the study of TQM and site-based decision-making led to the formation of a site council. Parents, students, or teachers with a problem or a suggestion fill out an agenda request form and turn it into the office. The site council has a four-member advisory sub-committee which reviews the forms in the order received and makes a decision about whether the item is a school-wide concern. If it is, it goes on the site council agenda where it is discussed and a decision made. The action is communicated to the school community through a newsletter, giving school customers a forum for airing concerns. In addition, a faculty/staff forum has been formed to hear teacher/staff complaints. The faculty elected representatives to form the committee. Any staff member with a complaint goes to a representative and the committee then makes recommendations to the principal about actions needed.

Johnston County Schools in North Carolina took involvement of the community to a new level. It put together staff teams (teachers, administrators, etc.) to conduct adult role model sessions in the community. They asked small groups of people from the community, *what should a high school student look like when he or she graduates*? This information has been reviewed by a district-wide curriculum team and the ideas from the community, such as character education, are being incorporated into the standard course of study.

Continuous Improvement Philosophy

W. Fred Scott Elementary School in Thomasville, Georgia modeled a continuous

improvement philosophy. To kick off the SERVE project, the principal asked the faculty for volunteers who would agree to spend one Saturday a month as a TQM team for the next three years. The principal encouraged the team to think of themselves as a curriculum improvement team and to focus on those issues that would make a difference for students. The team took the challenge and chose to study the use of higher-order questioning strategies in math. The study involved the entire staff because data was collected through peer observations. The principal and team were able to defuse concerns about evaluation and convince the staff that it was an opportunity to examine an aspect of teaching without being critical of individuals. The data were analyzed by grade level and school level.

The data indicated that the use of higher-order questions in math lessons was limited (77% were at the knowledge or comprehension level). Rather than being used for blaming, the data were presented to the faculty as an opportunity for growth. The whole staff then received a variety of training to support the goal of increased use of higher-order questioning. Peer observations in the following year showed progress (44% of questions were now at knowledge or comprehension level).

In the second year, realizing that math questioning is partially a function of types of curriculum materials used, the team decided to pilot a new textbook more in line with school instructional goals. Test results and continued peer observations were used to monitor progress. At the end of the second year, the team became concerned with improving Social Studies test scores, which led to a consideration of the state curriculum objectives and the degree to which they were being taught. The team explored the need to implement more effective classroom assessment practices (authentic assessments, portfolios, etc.). Future team plans call for research on low-achieving students in order to design strategies to better meet their needs.

It should be noted that this school had the "luxury" of continuity of leadership in that it was the only one of the four school sites that did not experience a change in leadership in the three-year period. Principals and staff need at least three to five years for tangible results in changing the culture.

Continuous Improvement Process

Evaluating the implementation and impact of new programs and initiatives does not come easily to schools but it pays benefits. In Rock Hill School District Three, one of the four teams created to pilot TQM was a district wide team consisting of teachers from all levels who were to focus on the problems of transitions between levels of schooling (elementary to middle and middle to high school). After being trained in TQM tools, this team did a needs assessment of the transition process. It looked at a variety of data such as teacher and student perceptions of problems, student fears, extracurricular activities in ninth grade, student grades and discipline in the transition years (6th and 9th), etc. The problem of "climate" was identified. Students did not feel invited into the new school. The size of the high school makes it especially difficult to be student friendly.

Meeting regularly, the team developed a range of strategies to promote more effective transitions; teacher exchanges (e.g., high school teachers visit 8th graders), student tours of the new school led by other students, traveling trunks for the elementary schools which helped 5th grade students understand what they needed to know for 6th grade, and better planned orientation sessions developed through the use of parent and student feedback. The team planned for the district's implementation of these strategies and then collected implementation and impact data, based on the key measures identified in the planning process. Results were more positive feedback on surveys of students, improved teacher perceptions, and improved grades, particularly in the 9th grade.

The team has continued to meet at least once a year to review these data and any needed changes to programs. The team leader is the district's director of instruction (Linda Allen). The effort and the evaluation of key measures has been institutionalized under her direction.

Deer Lake Middle School in Tallahassee is another school which modeled a rigorous planning and evaluation process. The TQM team agreed that their purpose was to support those students currently not achieving success. They focused their efforts on improving the quality of delivery services to students identified as "learning disabled" or at-risk. Data collected from teachers of "regular" classes indicated that many were struggling with meeting the needs of special needs students. Extensive data on identified students' academic performance were also compiled.

The data and team discussions ultimately led to a significant recommendation to the school's site council. The recommendation was the elimination of "tracking" of students such that language arts, social studies, and science classes would be heterogeneously grouped in grade six. The Site Council agreed and the team developed an implementation and evaluation plan. The TQM team collected implementation and impact data on teacher and student perceptions, class enrollments, and grade and test data. These findings were presented to sixth and seventh grade teachers. As a result, teachers on the seventh grade teams decided to pilot heterogeneous grouping during the 1995-96 year.

TQM team teachers at Deer Lake felt that a significant impact of their participation in the SERVE TQM project was the growth in understanding as a team and as a school of the need to base decisions on data rather than on intuition and to continuously monitor the implementation of new strategies.

Systemic Focus

As one principal from Johnston County Schools in North Carolina pointed out, "total" quality means thinking about quality as a criterion for everything that happens in a school or district. Are meetings handled in a quality way; are parents dealt with in a quality way; is maintenance handled in a quality way; etc. The three pilot schools (Smithfield Middle, Four Oaks Middle, and Four Oaks Elementary) from Johnston County made perhaps the most comprehensive attempt at instituting teams to look at all major areas of school functioning. They asked teachers to volunteer for participation on any of ten teams established.

There were seven cross-functional teams (consisting of staff from across grades, programs) to cover the major areas of school functioning. There was a leadership team (quality council), a technology team, a student service team responsible for remediation, incentive, and parent involvement efforts, a communication team responsible for improving internal and external communication, a school climate team that addresses staff and student morale, a curriculum and instruction team which reviews school wide needs (emphasizing reading and writing skills in all areas), and an assistance/crisis intervention team.

To promote continuous improvement in core subject areas, one team per grade level was established to meet once per day (and once per week with the principal) to assess student test data and formulate instructional strategies. In addition to empowering the staff through teams to help manage the school improvement process, these schools are also concerned about the application of the idea of continuous improvement to students in the classroom and have sent fifteen teachers per school to be trained. These principals and their staffs are committed to looking at the "big picture" of school functioning and attempting to apply the idea of quality in a comprehensive way to all aspects of school functioning.

Quality Leadership

Types of leadership varied across sites. Some principals were more convinced of the value of giving up power than others. Other differences were in decisions to lay out expectations and parameters for team functioning and decision-making up front to the whole faculty (for example, that the process will take time and will be work intensive and will not be a "quick fix"); in their willingness to encourage and support teams in taking on critical instructional delivery issues; in their willingness to let teams make mistakes and learn from them; and in the level of vision they had for how teams might be the

workhorses for systemic improvement. All sites would probably agree that TQM can't be forced on a reluctant leader. For this reason turnover in principals could potentially have a devastating affect on a TQM effort and staff morale.

Both district sites experienced turnover at the superintendent level during the three-year period, leading to a period of transition. Both districts had in place prior to this change a district wide leadership team or council, which may facilitate the transition. Although in one district, the new superintendent continued the TQM effort, in the other, the effort continued, but as part of a total strategic planning approach.

Improvement Versus "Gotcha" Culture

There is some beginning evidence, at least in individual classrooms of teachers involved in the TQM training, that the philosophy of moving each student to continually improve and empowering students to apply tools and take charge of their own learning and goal setting was happening. Several sites have provided support to teachers to attend training sessions in the classroom applications of TQM. However, all would likely agree that nurturing this kind of culture among all teachers is a slow, evolving process. Teachers at one school mentioned that teachers most resistant to change were beginning to notice that others were moving forward and that they were being left behind. Modeling may be a powerful change agent.

What impact can exposure to TQM philosophy and tools have on teachers? One site, Magnolia Junior High in Moss Point, Mississippi, selected five lead teachers to participate as the SERVE TQM team. These teachers experienced significant growth from applying TQM concepts to the classroom. Some of their comments are shown below:

The main change at this school for the first year was the fact that those five teachers started introducing some of these principles in their classrooms. A lot of the students got introduced to TQM.

The biggest thing that affected my teaching is, I try not to let fear occur in my classroom; fear of me, fear of the subject, fear of failure, fear, period. I try not to let fear exist because I think that's the key. Where fear is present, quality isn't.

When students ask, Are we doing this for a grade?, my tendency used to be to say yes or no. Now I say, You need to ask yourself what you're going to get out of this, rather than whether I'm taking it for a grade. And that's helped the kids a great deal. I do it at the first of the year and then kids learn to parrot it. A new student will come in and ask, Are we doing this for a grade?, and the kids will respond, No, you're supposed to find out what you're getting out of it. And that's pretty neat for me that the kids are saying it.

One outcome I've noticed from my students is that they are more readily accepting responsibility for their own learning. I've assumed more of a role of facilitator. I've allowed them to take more responsibility.

TQM will definitely affect you. If you want to get better, it will change you. If it'll change me, it'll change anybody, because I've been teaching for more than twenty years and I'm hard-headed, hard to change, and it made me take a strong look at myself.

TQM is not a quick fix. Teachers have had so many quick fixes over the years, they're leery of anything new. So I think only if you approach it from the standpoint that it's not a quick fix, then I think teachers will be more receptive to Quality in their classrooms.

Now armed with a better understanding of how the six sites applied TQM to their setting, in the next chapter, the educators from the sites report how they viewed the experience.

CHAPTER 4

What Do the Educators at the Six Sites Have to Say?

SERVE commissioned an outside research firm (Simmons, Boyle, and Associates of Chapel Hill, North Carolina) to collect data from educators at the six sites described in the previous chapter regarding their perceptions of implementation, impact, successes, problems, and lessons learned. To meet the study objectives, investigators used focus groups, individual interviews, and content analysis of focus group transcripts as the primary qualitative research tools. From a series of preliminary telephone interviews with school principals, central office staff and SERVE training consultants, investigators determined who at each site would best be able to provide insight, from a full range of perspectives, into the implementation of TQM.

Investigators then developed focus group protocols and recruited participants. Focus groups are guided discussions which provide insight into perceptions, attitudes, apprehensions and concerns. The focus group discussions and interviews were recorded, transcribed, and content-analyzed to identify and organize dominant issues.

- Focus group discussions were conducted with the TQM teams at each of the four individual schools.
- At the two system sites, the TQM team members from each of the participating schools were combined into single groups of twelve participants or more.
- To supplement the perspective of the TQM team members with that of teachers who were not on the TQM teams, four groups consisting of randomly selected teachers were formed.
- Recorded interviews were conducted with eight principals and one central office representative.

The following is a summary of the findings presented to SERVE in the final report from Simmons, Boyle, and Associates. Specific comments from the focus group and interview transcripts have been extracted and interspersed throughout to illustrate themes.

Findings

1. Participants' Definitions of TQM

When asked to define Total Quality Management, participants mentioned the six components discussed in the previous chapter, variously speaking in terms of a management or customer philosophy, a continuous improvement process and a teaming structure.

A. Customer focus. Some defined TQM in terms of maintaining a customer focus.

- The reason TQM works is because it establishes what is important. Some of these things that were very

important to our customers as a teacher I would never have thought of. If it were not for the process of going through all the TQM training and handling the TQM processes as we do, I would never have come up with what the customer wanted. And no matter what I would have done, I would never have come up with the customer's needs, nor would I have solved them.

B. Constant dedication to continuous improvement. Others focused on the meaning of continuous improvement and the continuous improvement cycle of planning, implementing, studying, revising rather than complaining and blaming.

- I basically feel like TQM is dealing with solving problems and the way to go about solving problems is the Plan, Do, Study, Act part of TQM.

- It is an endeavor by the educational community to learn from the business community how to improve schools, how to provide Total Quality throughout the system. That means to continually evaluate yourself, your purposes, your programs, and then to try to make improvements based on what your situation is.

- I see it as a model for implementing continuous improvement following some principles and using some tools. Gathering data in order to analyze a system and improve a system and keep the improvement going.

C. Understanding of how the parts of the system fit together. There were fewer comments about this aspect of TQM, perhaps, due to the fact that implementing improvement at a systemic level, looking at all the parts simultaneously, is an evolving process. Schools typically start small in developing the capacity to analyze and reflect on their functioning. Perhaps the first level of this component is simply awareness that it is important to think about and talk in terms of processes.

- It makes you real aware of processes and not blaming other people for something not working, and looking at the process that's involved, rather than looking at the person who's doing it.

D. Effective use of teams, and

E. Quality leadership. Most consistently, however, participants define TQM in terms of a process and structure for shared decision making, stressing the involvement and empowerment of the faculty, and the changing role for the principal.

- Total quality management to me is having everyone involved with children's learning. The parents, teachers, faculty, administration, staff, even the custodian, all pulling together to reach a common goal.

- I see TQM as a way to involve as many people as possible: teachers, administrators, staff, parents, community leaders, even students in decision-making processes. It also teaches you about working together to reach a common goal.

- Education is a little behind everybody, because, as I said, education puts the emphasis on top-down, you know, superintendents, hierarchy down. And I know industry still has a hierarchy, but they're getting people to buy into the job, and they know that if you go to work at this place, you're going to have a say-so and you're going to be empowered to do your job. I think that it's been too long in education that teachers don't have enough say-so.

- I think the main thing about Total Quality Management that is new in a lot of education is the empowering of people to do their job. In education, a lot of times, we have a tendency to do top-down things. To me, that's the important thing about TQM, that everybody feels like they've got ownership in this thing.

- We took the ball out of the principal's court and we started controlling things a little bit more and more. I guess we kind of think we are somebody. And we used to just take notes and do whatever they told us to do. Now, we do what is right for children, but we don't have a boss. We're all in it together. When we finally had a voice, and now we're so protective of that I couldn't go back to somebody telling me what to do.

F. An improvement versus "gotcha" culture. Because all of the project sites started with TQM as a school management change rather than as a classroom management change (which is not to say it could not have been implemented first in the classroom), there were few comments that fell in this category. A few participants did

contrast TQM with fads and management by results and suggested that over time there would be a culture change in the classroom due to the culture change in school management.

- If it creates an atmosphere where change can take place, eventually it will make a difference. It gets into the whole time frame thing. I think we in education tend to look at quick fixes and bottom lines and scores at the end of the year. On the short run, with total quality, I don't know if you can measure its success or failure. But if what they are looking for is team effort in the relationship between teachers and students, in what goes on in the classroom and the way decisions are made then those decisions over a period of time will begin to make a difference.

2. Considerations Regarding Facilitating Understanding of TQM

The time spent in formal workshop training on TQM concepts, tools, and related issues varied across the locations. However, much more time was spent by teams in trying to apply TQM to their selected problem areas than in formal workshop, training sessions. Transfer of reading material and knowledge related to TQM itself was ongoing, involving self-training, reading, meeting, and trying to understand quality beliefs and principles. Most agreed that the real learning occurred in the application of TQM.

All the TQM pilots acknowledge the initial importance and benefits of relationships with facilitators from outside their school or school system, citing the need for expertise and experience not available in-house, and for the broader perspective that outside facilitators provide.

Although some participants felt strongly that trainers should be educators, others argued that the sensitivity of the facilitators is more important than their background. Personality and interaction with staff are the keys.

Only through applying TQM did participants come to understand it. Even though the learning curve was steep and time-consuming, the sites acknowledged that they have successfully developed their own TQM applications and gained experience and confidence in their use of quality principles and tools. TQM training in the abstract or in the absence of the opportunity for a team to work together on a real "improvement" or mission is not recommended.

- A good thing we did was to find a project to start with right away. And trying to get it put into a hands-on project right away was a real learning experience. We did things backwards, sometimes. We had to work our way back.

- Probably last year was when we really started to wake up and when we could start seeing things. But it was something we did on our own. I respect our trainers, but I think it's a process that we pulled out of ourselves. It's not that they turned on the light.

A hard decision faced in implementation is how widespread TQM training should be. Some TQM participants suggested more introductory TQM training should be provided to entire school faculty at the onset. Sites which were more successful in achieving total faculty ownership were those in which the principal oriented the whole faculty to the effort and asked for volunteers to participate on teams. In sites in which the principal had selected a team for participation with little faculty awareness, some resentments developed as comments below indicate.

- I would have liked to have seen the whole faculty have the intensive training that the small group had. I think it needs to be a large thrust right at the beginning to get everybody on board and everybody understanding what it is. Everybody needs to understand how it is going to be part of the school. I think everybody needs to understand that and buy into it, at the very beginning, instead of it being small groups of us starting out.

- We didn't have the dissension at our school but I did feel like they thought, "I wonder what's going on in there when they close that door and have those meetings". TQM, they knew meant Total Quality Management. Other than that it was a mystery. Inservice time could have been used for that. If we had used the inservice training for the whole group, then they would have been more supportive.

In one of the six sites, Johnston County, the principals received a week of intensive TQM

training prior to introducing TQM to their faculty. These principals suggested that this prior exposure and lead time helped them put TQM in context for the faculty in terms of how it will help them better serve their students. In all other sites, the school administrator received training at the same time as the participating teachers, which was perceived as somewhat problematic.

- Had the administrators had a start on us, they could have seen some of the problems.

- Make the upper echelon go through the process and accept it and have their mindset open and then move it down. I think they need to have more experience than we (teachers) do.

3. Perceptions of Implementation

At a basic level, the success of the TQM project can be gauged by the amount of team effort expended in trying to make improvements and their effectiveness in implementing improvements.

- Are there some kinds of teams that are working regularly in the school? Are there some issues being targeted? Is progress being made toward those? I think those would be real key issues to see that there is activity going on in the school using total quality management rather than just people saying we're using it but no activity is going on.

All of the sites were successful in forming teams. All sites formed TQM teams which operated over the three-year period. All of the teams studied improvements, and collected and reviewed data. The participants suggest that TQM can and does provide a vehicle or process for facilitating positive, measurable change in the school or school system setting.

- We felt that if we could implement heterogeneous grouping for at least a year, then we could use some of the tools we learned to study it. From what I've seen so far, it looks as if— I really have a feeling we're going to see that it's going to be very successful and beneficial. I think without the system to help us analyze that, I wouldn't know that.

- It's certainly made us look more critically at our curriculum. I mean, we've taken math and social studies apart bit by bit and we'll go into further areas. Our level of questioning for the students has improved. Instead of asking just lower-level questions, now the teachers are asking high level questions. And in the social studies program we're looking at all aspects of the state assessment program, and we are working, and our scores are gradually coming up.

- We still don't have the results completely from our group, but I really think that the most important thing was the effort that was made. Even if it turns out that we didn't improve discipline that much, the fact that we paid attention to it and focused on it during the time that we did and that we all worked together on the project is just as important. We have a lot of offshoots of other TQM groups. Because we liked it, I think others wanted to do it to.

Through TQM, the participants have embraced the concepts of data-driven decision making, and have an increasing understanding of and appreciation for the information gathering and data analysis tools. They talk about stopping to study problems rather than just acting.

- The scientific approach is a very important aspect; taking surveys, really trying to get a genuine picture of what is going on, rather than an intuitive sense.

- It taught me as a teacher that you just don't make judgments. You use a lot of information and data to back things up.

- Instead of just guessing, "hey, I think this might be a problem" - I think we're now provided with some tools to help us use data more effectively and analyze more effectively problems within our system.

- I saw it last year on our site council. The way the site council started to work was following some of the things we've learned in TQM - not just making the decision based on what we think or feel. We investigated first. It prolonged our process of making a decision, but it made more effective decisions. We did a lot of investigating, a lot of work, using a lot of the tools and principles they taught us through TQM.

Focus group participants understood and accepted that TQM is a long-term process, suggesting that it takes a year to become comfortable with the language, tools, and process. Beyond this initial year of learning the basics, participants varied widely in their opinions about the time necessary to fully implement TQM, indicating that the pace of implementation depends upon the layers of implementation, the confidence level of the teachers, and facility with use of the Quality tools.

- The implementation of the philosophy is not fast because it is so different from what most people have been doing. I still have some teachers after two and a half years who are not real comfortable making a decision on their own and I say to them after they ask me the question, "What do you think?" and they say, "I know, I know, I can answer that" and I say, "right, you can".

- The first year is just digging and studying and training the team. And not expecting a whole lot of change or anything else. You've just got to learn to use the tools, gather information.

- It is not a quick fix, it is not something that within a month or two you're going to understand totally and be comfortable. This takes a long time.

4. Perceptions of Impact

Focus group data describe a variety of positive impacts either as a direct or indirect result of having implemented TQM.

▲ Improved problem-solving capabilities

We work better together now than we did before. We go about solving problems in a more systematic way. I don't think that change would have occurred without this particular emphasis.

I think TQM just sort of took the guesswork out of, "What's wrong?" We learned that you need to go to the customer and find out what's wrong. We surveyed the kids in ninth grade, in the eighth grade, in the sixth and fifth grade. "What scared you the most when you came to ninth grade?" The eighth graders were asked questions like "What is your greatest fear of going to high school?" So by surveying those students and finding out from them what their fears were, what they were worried about, that gave us something to go on. We surveyed the parents. "What are you worried about for your child when they go to middle school and high school?" We surveyed the teachers. By following that format and surveying and identifying those problems, it took the guesswork out of "What's wrong?" and TQM gave us a process.

▲ Better decisions

I feel like it has been a good experience, too. I've been on the committee for two years. The whole process of TQM has helped us at our school. We have made some good decisions using that format. I think we might not have made those decisions had we not gone through the process. We probably would not have thought through our reasons behind our decisions quite as carefully.

▲ More focused

I think we are more focused now. I think three or four years ago we were floundering and knowing we needed to improve, but we didn't know how to specifically focus on what we needed to improve. Total quality has helped us focus on what we needed to work on and stick to it.

We approach school improvement more seriously, more systematically. I think the change isn't, we haven't reached the point that we need to be, but everyone seems committed to improving, to continue learning, and refining the process, so that school improvement isn't something vague.

▲ More in control, confident, successful

Things take a little longer, but once we have made the decision, we're more confident in what we've done, and we have ways of evaluating what we've done, and we can always go back and fix; if there's a problem, we can change it. I think that's what TQM has done for us. It's been very effective.

I've worked with teachers in my department to start looking and analyzing things, and when you can start doing that you just feel better about yourself. You feel like you're successful during the day.

▲ Increased communication and better relationships

The people that we trained with in teams are really close. We got in there and solved a problem together. We listened to each other.

I think relationships between teachers improve. And any time you have improved relations, it is going to impact what we do because we are going to do a better job.

What I like about the program is that is encourages a lot of team support. We meet more in my grade level. We meet once a week and plan, talk, so we are more conscious of the way our teaching strategies work and how to get the children to think in a more critical way.

Because of the TQM committee working on the transition, our relationship with the other schools in this system has really changed. That has all come from the communication, from sitting down and working with those teachers over there together, our school and their school working together. We would probably have a revolt if we tried to go back to an authoritarian type of management.

Thus, a powerful impact of TQM at some sites was the breaking down of barriers and competition across grade levels, disciplines, and schools.

▲ Provides a common language

Politically now, I think that a connectedness with the business community is important for educators in terms of having a voice as to how things are going to go in the next three to five years.

It broadens the base of influence in schools. It involves more people of different types in the decision-making process. It opens up the educational process to the entire community.

▲ Enhanced classroom effectiveness

Although the initial training at the six sites was not specifically directed at TQM in the classroom, several participants discussed the issue of the impact on student performance, feeling that it was an implicit goal that teachers apply TQM to their classroom setting. In particular, they realized that just as decisions can be made about how to manage a school, teachers make decisions about how to manage their classrooms.

It has helped me change a lot of my styles of working in the classroom. The students have become my customers.

I've been in education for 25 years and TQM has given me a way of doing things differently that benefit me, my students, the way I make decisions, the way I relate to students and parents, understanding that if it wasn't for my students I wouldn't be here.

5. Leadership/Personnel

Focus participants from all six pilot sites, including principals, identified leadership from the principal as a key to successful implementation of TQM at the school. It is within this context that participants cautioned that schools should attempt to implement TQM only if the principal is open to change and willing to share authority.

The personality traits of the principal need to be examined before anybody even contemplates TQM. If you've got a dogmatic person, and somebody that is typically top-down, I think you need to avoid it because you can't change a personality.

It is definitely not for every school, not for every principal. The principal is going to make it or break it.

And I as a school leader had a difficult time adjusting initially, letting go of some of the control and power.

It won't happen unless you have a principal that supports you even if their opinion is, "that's not going to work but I'm going to let you try it so that you can go through and figure it out and see what you did wrong". I feel that should filter down to the classroom. It should filter to the children.

The leadership has got to buy into it first. They've got to be willing to give up their power so they can empower the teachers.

There must be a climate of mutual trust and respect for TQM to succeed. The principal sets the stage for

trust. Some schools, judging by comments, have been more successful in establishing this climate of openness than others.

Participants also say that faculties must be receptive to change.

The status quo is hard to buck; it is a major, major problem and I think the composition, complexion of a school is going to be the single most critical component. You've got to have some younger teachers, young blood.

There are some faculties that have always been led by an autocratic leader, never had to make decisions, are not comfortable making decisions, and don't want to do it. I don't think you can force them into that. They're not going to want to participate.

To overcome initial skepticism among school stake-holders, they must fully understand that TQM is a long term process, and not a quick fix. School leaders can make this expectation clear.

I think that if another teacher said to me, "It's going to take a real time commitment and it's going to be the hardest thing you ever did", they could convince me that it was worth trying. Teachers are not idiots. And for many years we have been treated as though we didn't have enough sense to look at a problem and take it apart and come to some kind of solution. I think teachers would buy in, given correct information.

I think if your faculty is going to implement quality, that they have to realize right up front that it's a process itself that you have to work through. And you're not going to go in every meeting and get an answer. We don't need quick fixes. They don't work.

To the extent that it is a goal to change the school culture through TQM, participants suggested that TQM can be oversold and create unreasonable expectations if the introduction does not clearly outline the parameters of team influence and faculty input and decision-making.

A lot of people thought that the whole school was going to run the way TQM did. When the principal would hand down some decision, someone would say, "Well, what happened to TQM?" We were still operating under the old system. Yet a lot of things were being done in new ways. The contradiction threw a lot of people, especially those who were not involved on any of the committees.

Start out saying, "We are going to work on these areas". Not have everyone think, just because we are going to do TQM that the entire school can by run by TQM.

There was an interpretation by our faculty that all decisions would be made through TQM. There were decisions that were targeted at being TQM and then they were not. Things would have been much better had things been clearer as to what was going to go through TQM process and what was not and why not. If the explanation is there, I am fine with that. I think there needs to be a constant explanation of what we are doing and why we can't use TQM if we can't. I think if you do that, people will continue to believe in it.

But your issue about politics is also important. If you are talking to other districts, they do need to be careful not to put that out there so that it becomes a target, like Outcome-Based Education has been. It is just a label. Nobody knows what it is. People who are not up on what TQM is are going to be down on it. In terms of the general public, if they want a target, they could easily make one out of this. So you just have to be careful not to broadcast it too much. Just go ahead and do it and when it starts to make a difference, it starts to make a difference, whatever you call it. I would caution not to broadcast to the paper that they are going to spend thousands of dollars on TQM. Because it isn't just a program, it's a process and attitude and it takes time to permeate. It could easily get to be a target.

To summarize the role of the principal, participants indicated that the principal should be comfortable releasing power to others, should clarify expectations about the long-term and continual nature of the process, should set parameters for team decision-making, should provide leadership in planning for dissemination of TQM within the school, and should encourage a trusting and open atmosphere.

6. Time in the School Day

Time for training, planning and application of TQM tools is cited across the board in the focus

group dialogues as the most significant potential barrier or impediment to implementation of Total Quality Management. The kind of in-depth discussions about beliefs, purposes, strategies, evidence, etc. that these sites experienced take time, quality time. If teams do not meet enough, at least every two weeks, they lose the thread of their discussions and have to review at each meeting.

TQM team members acknowledge that the move to Quality requires a great amount of extra work, with the work being an addition to their usual full-time responsibilities.

I have asked this faculty to do probably thirty percent more than they've ever done in their life and they've gotten no compensation, all they've gotten is me saying thanks.

That's the whole thing is time for planning. You can't expect teachers to take on a whole lot more on their plates. They just don't have time.

The biggest problem you've got is time, I'm telling you. What they're asking is for us to do this when we're tired, at the end of the day.

You have to provide those key players that are going to implement TQM with quiet time. You're going to have to bite the bullet and have a couple of additional teacher units so that you can create some one hour blocks during the school week so that teachers can have a chance to digest this stuff while they're fresh.

7. Funding

The funding provided by SERVE for outside training and facilitation, released time for teachers, and to compensate teachers for the extra work involved in participation in TQM clearly was critical to the success of the TQM pilots.

While there was some acknowledgment that it would have been possible to implement TQM without extra resources, the related issues of time and money would have been much more significant barriers.

The funding helps with attitudes going into something, that the teachers know, "if I take four days this summer, and I get into this training, I'm going to be compensated for it."

You need to be willing to pay people for hours spent after regular work hours, and I think that's so important because so often, we ask educators to just donate all this time after hours.

8. Continuity

Consistent with national trends, during the three years of the TQM pilot, turnover in school or system leadership and in participating staff has occurred at all sites. Both school district pilots have new superintendents. Two of the four school pilots have new superintendents. Three of the four school pilots changed principals. Only one school pilot site has had no leadership change.

The focus group discussions and the interviews sought to probe the issue of continuity, with, participants being asked to comment on the impact of school leadership turnover on Total Quality Management.

The issue of leadership turnover emerged as a significant potential barrier to TQM, with participants acknowledging the difficulty of continuing TQM in a formal, systemic manner should there be a change to an unsupportive or autocratic leader. While there was confidence expressed by participants at one pilot site that TQM was sufficiently embedded in the school culture to withstand a leadership change, their confidence was grounded in the empowerment and ability they felt, through site-based management, to influence leadership attitudes and selection. The overriding consensus among teachers, however, was that while they would individually continue to practice TQM in their classrooms, that, as a school or system-wide process, TQM would not continue in a formal way in the absence of supportive leadership.

In a related issue, participants emphasized the value of providing thorough training for new faculty, principals and TQM team members to assure continuity of the process. Continued

access to training as turnover in staff occurs is important.

Comments from most of the schools which have experienced principal changes during the course of the three-year pilot indicate that while TQM implementation progress may have slowed and new school administrators feel some frustration in trying to catch up, the new leaders were supportive, and have been receiving the necessary training, as time allows.

An interesting perspective on the future by one of the four school sites is uncertainty about how the ending of the SERVE grant will affect continuation. One participant suggested that the approach might be dropped with the ending of the grant because administrators had not realized that it would mean giving up some power. Thus, the teacher is unclear about whether "empowerment" of teachers is just a phrase, based on a desire for grant funding, or whether it has truly been embraced. Clearly, quality leadership by the principal is critical to continuity.

Some of the participants, although positive about their experiences, expressed varying levels of concern about where the effort will go from here. A school, acting alone to implement TQM (without a district-wide TQM effort), as were the four school sites who worked with Westat, is particularly vulnerable to losing their leader (a principal change) in the early years. However, even in the districts which are encouraging all principals to manage with TQM and providing them training and support, not all will initially be comfortable with the role demanded of them. A principal change can have implications in district-wide implementation if the new principal is one of those who is not comfortable with the ideas.

Lessons Learned

To provide a summary of observations about TQM from among the six pilot sites, comments for this section were drawn from the focus group dialogues to illustrate lessons learned about TQM and its implementation. Also included in this section are responses to the question, "Based on your experience, what advice would you give to a school or system considering TQM?" The lessons learned and advice provide a concise overview of the range of issues addressed by school stakeholders throughout the study.

To the extent that TQM teams at the pilot sites learned and applied the Total Quality Management philosophy, principles and tools in achieving specific, targeted outcomes, all the sites can be said to have demonstrated successful implementation of TQM. In six very different contexts, the pilot sites have all demonstrated the viability and applicability of TQM in the school setting, with none indicating that the effort had been unproductive.

However, now in the third year of implementation, none of the sites would describe themselves as managing by a total quality approach at all levels. The process of TQM is demonstrably long term or evolutionary, with each site evolving or maturing at a rate determined by site-specific conditions or circumstances. While no single site yet provides a complete model of a mature TQM culture, a composite of the TQM experiences from the six pilot sites reveals both the keys and barriers to successful implementation which can be viewed as fundamental issues to be considered by schools having an interest in TQM.

Consistently among the six pilot sites, the **keys** to a total quality school or system were said by the stakeholders to be:

- A committed and supportive leader who is willing to share decision making authority;
- A faculty that is willing and open to change and/or can be convinced of the need for improvement; TQM training for school administrators, faculty and staff that is clearly applicable to public education and appropriate to the individual school or system setting and climate;
- Time for training and participation in the TQM process which does not result in participants being pushed beyond their effective capacity;

- Inclusion of all faculty in an orientation or introduction to or otherwise informing them about TQM; and
- Recognition that TQM is not a quick-fix solution and requires the continuing commitment of all stakeholders.

The potential **barriers** to TQM are essentially reverse images of the keys:

- Unsupportive, autocratic leadership;
- A faculty which is largely content with the status quo;
- A lack of adequate or appropriate training;
- Insufficient time or resources for training and participation in TQM; and
- A lack of continuing commitment to the TQM process.

In most cases, the identified barriers can be overcome by creative leadership, resources and training. One potential barrier, however, emerging as particularly problematic, was the issue of leadership turnover. All pilot sites experienced a leadership change—either the superintendent, principal or both. Fortunately, the new leadership in each observed case was either supportive or open to TQM, and while implementation slowed, it did not stop.

An interesting question is at what point a school or district would have instituted enough of a total quality management structure and process that it would resist a new leader who supported a different style of management. The culture of any school is sensitive to the turnover of its leaders, and the mix of trained, committed TQM staff to untrained, unempowered staff is critical to continuation.

CHAPTER 5

Considerations in Getting Started

What does TQM have to offer?

The previous chapters provide a sense of the benefits of this approach to the management of the school improvement process. TQM takes up where site-based management leaves off. The push for site-based management has been predicated on the belief that better decisions will be made and morale will improve if faculty are involved in the decision-making process of the school. Research shows that directing schools to implement site-based management in the absence of any management theory, philosophy, process, or structure can lead to confusion. Exposure to TQM can provide an organizing framework and tools for teams to use in their quest for improvement.

Secondly, TQM can help establish a commitment to put children before the needs of the bureaucracy. Children need to feel important and that they are being supported as they grow and improve. They should not be made to feel like failures, as many currently do in schools where only the brightest can experience success. The ultimate implementation of TQM is in the establishment of a school community which is dedicated to the continuous improvement of programs, teachers, and students.

In addition, at a district level, TQM can provide a common language and belief system across schools to guide decentralization efforts (site-based management). Some TQM districts build their administrator evaluation system around the total quality approach to management. Principals are evaluated on the extent to which they use this approach. In this way, the district is providing a vision for all school leaders to strive for. Similarly, some districts have used some of the major ideas of TQM (reflecting on quality, empowering through the use of input, choice and teams, use of data, etc.) as part of a process of involving teachers in discussions of a common vision for a good classroom environment. In addition to providing commonalities across classrooms and schools, it also provides a common language between schools, the higher education community, and the business community since all levels can and have applied TQM.

What schools or districts might benefit from TQM?

As several comments in the last chapter suggested, TQM is not for everybody. At one extreme, there may be schools or districts who are already operating with a TQM approach, due to excellent leadership, but have not identified their approach as TQM. The beliefs about how to manage change represented by TQM are shared by many leaders. A school or district can operate in harmony with TQM principles without ever having had exposure to the approach. As mentioned in Chapter 2, the components of TQM are similar to others in the educational reform literature (e.g., the principles of effective schools, the components of school renewal in the Professional League of Schools). At the other extreme is the leader who truly resists yielding power. TQM may not be for that school or district. Perhaps the ideal client for TQM is a

school or district that has recognized the need for significant improvement and recognized the need for faculty involvement, but does not have a framework or guidelines for starting the process. TQM provides the knowledge and skill base for harnessing the power of teamwork. Another type of school or district that may benefit is one that has welcomed change and has been struggling with improvements but has tended to bounce from one short-term improvement to another. TQM provides the anchor for the long haul. Lastly, a school or district which is interested in having teachers involved in discussions of factors involved in increasing student responsibility and improving the classroom learning environment could well benefit from a TQM initiative.

There are clear advantages to adopting the philosophy and process of TQM at a district level. The district can offer school teams support in the form of a guiding mission statement, curricular objectives and other system wide improvement goals, resources for professional development, facilitation, data analysis, and incentives in the form of recognition and encouragement. That is not to say that individual school sites haven't and won't continue to implement TQM, even in cases where the district is not actively involved. The example set by one "lead" school may pave the way for district support for other schools.

What do school leaders need to consider in starting TQM?

From the data presented, the principal plays a key role in building a TQM culture. Some planning questions for principals to consider are:

1. Will you obtain intensive training before your staff so that you can help support their learning and implementation? Most sites agreed this was desirable.

2. Once you are "sold" on the need, how will you introduce the need for TQM to the staff? (what it is; why it's important; how it will help the school achieve its mission; how it makes students the priority). This came up several times in the focus groups. Faculty at some sites felt that most teachers would accept the change if the principal conveyed the long-term and continual nature of the improvement process and that it is hard work. Teachers will likely relate well to the need for an anchoring process (identifying what works or doesn't work as a basis of improving, rather than continually adding new programs).

3. Should the faculty/staff be given a choice about whether they would like the training as a way of improving the school management and improvement process or as a way of improving the classroom learning environment, or will you make that choice? In the SERVE sites, all used TQM as a base for better site-based management (improving school outcomes through more effective use of teams). However, as more training resources (books, workshops) become available on classroom applications, others are finding that introducing TQM training at this level is an option.

4. If faculty/staff study or improvement teams will be formed or perhaps, rethought, what kinds of team(s) will you recommend? Should the teams be existing teams such as grade level or department teams or new, cross-functional teams to look at a specific area or both? Continuous improvement (study the problem, plan and implement, evaluate, revise, evaluate, etc.) is a time-intensive process that needs initial leadership from either inside or outside facilitators so decisions about the number and kinds of teams should take into account resources (your time, teacher time, training/consultant funds).

5. Consider how a fair and open process for initial team selection might occur to avoid any conflicts among team members and others. Some "we-they" resentment among faculty did occur at sites where teams had been selected by the principal without the rest of the faculty's knowledge.

6. Who will research and select the trainers/facilitators for the process? What changes in schedules need to be made to allow teams to meet regularly?

7. How will the parameters for the team's work be developed and communicated to faculty/staff? Linda Smith of Smithfield Middle in Johnston County developed a school team manual that lays out the responsibilities (purposes and description of team programmatic responsibilities) for each school team along with expectations about how teams will function (roles of members, agendas, reports, etc.). Such a manual could go a long way to providing the "big picture" to all faculty/staff about how team responsibilities relate to each other.

This list is not an exhaustive one but one that reflects the experiences of the SERVE school sites.

What do districts need to consider in starting TQM?

The two SERVE pilot districts, after three years, are still committed to the continuous improvement of quality services. As pointed out in the introduction, there is no one correct way to do TQM but there are some things that can be learned from these two districts. We asked the two districts for advice they would share with others. (The quotes are theirs.)

Communication Issues

As indicated above for principals, district leaders must also analyze communication issues. Not only does the district office have to communicate with the school board, but also with businesses, higher education, principals, teachers, students, and others. All of these entities ultimately need to understand the reasons for considering a new management culture.

TQM takes long-term commitment to work. To "sign on" to this tough journey people need to feel a sense of urgency and know that there is a need for significant change. Satisfaction with the status quo makes the desire to implement TQM unlikely. What needs to be done to get TQM started in an organization where we are constantly seeking the flavor of the month; the magic bullet that will solve all our problems?

1) First, communicate and discuss the need for TQM with affected groups. There is much research about why reform of education has not yielded desired results. Many of the problems identified fit well with TQM principles (e.g., program decisions are based on intuitive wisdom rather than reasoned looks at data; centralized mandates assume staff/students are the problem rather than the beginning of the solution if empowered and trained to work in teams). If the school board understands and supports the need for TQM, its visible support will likely make principals and teachers more willing to participate. This support also provides some assurance of continuity should there be a superintendent change.

2) Second, start with a manageable number of volunteer teams (interestingly, both of these districts picked three pilot schools). These schools or staff could be chosen on the basis of having significant concerns that need addressing or being particularly ready for a more organized framework for change. Finally, support them in sharing their experiences. Principals may need to be convinced that TQM is not something done in addition to site-based management. It is a way to do site-based management better. When participating principals share their experiences with others, they can help alleviate unfounded fears and perceptions.

As initial teams, either district-wide or school-based, are selected to participate in TQM, one possible way to avoid miscommunication is to have them develop project proposals describing their work. The proposals are shared with and agreed to by district and school leadership. Once parameters are formulated, the team is assured that the team's proposals for needed improvements can be implemented. Without this initial agreement, disillusionment on all sides is a real possibility as teams may be told that a plan cannot be implemented after much time was spent in its development and team members are

committed to the ideas. Another advantage is that the proposal forces the team to clearly articulate the problem, key measures, and strategies.

3) Third, teachers who apply TQM tools to improve the learning environment can be powerful advocates or champions of the need for culture change in the classroom.

Last year's Teacher of the Year used quality tools in the classroom and she can talk that talk to other teachers. We need more of that. We need teachers to step forward and say, I can do these things and they worked. As an administrator I could sing it for months and it wouldn't sink in. You could take two teachers in there to talk to other teachers and sell it like that. One of the things that the state steering committee is asking for is videos because they're getting the question from potential funders, tell me what it looks like in a classroom.

In conclusion, although principals, teachers, and students will only truly understand what TQM is by trying to apply it, others' success stories can help them open the door and understand the purpose for opening the door.

Training/Facilitation Issues

1) Training is an expense that needs to be carefully studied. It is important to investigate available resources and talk to other systems about resources they have used.

2) In addition to considering how TQM training fits into the organization's professional development efforts for all school leaders, teachers, and others, training for school teams on the continuous improvement process should be "just in time," that is, closely related in time to the team's study of a problem or process. Support from the trainer should continue through the first improvement project with the trainer periodically assessing team effectiveness and reemphasizing important considerations.

It is very easy for teams to slip into non-productive and time-consuming behaviors. In Rock Hill, every team meeting is evaluated by each member on factors related to good team processes to help internalize high standards for team meetings. Another obstacle for teams is an initial rush to solutions without thoroughly understanding the problem. A good facilitator ensures the right questions are asked.

In some cases, the principal might be able to perform this facilitator/trainer role.

3) A final consideration for districts is the balance between central office, school leader, faculty/team, and teacher/classroom training support. Recently some districts have begun to implement from the bottom up. Teachers and the classroom learning environment might be considered the entry point for several reasons. There is some evidence that the principals as a group might not welcome TQM as a management change initially, but if teachers begin to learn the concepts for the classroom, principals would be more motivated. Another rationale might be that quality starts with the individual and that teachers are the most critical individuals in the system. Or, finally, it may be that culture changes will grow better roots if teachers are given opportunities to discuss and agree upon "ideal" classroom learning environments. Based on these understandings about relationships between students and teachers, school leaders would be in better positions to manage school improvement processes.

In closing, there is no right way to implement TQM. Rather TQM represents an opportunity for those in an organization at any level (student to school board) to examine their working environment and "culture" and to begin a process of changing that culture if needed. TQM is consistent with efforts to increase local responsibility for school improvement and students' responsibility for their progress.

Finally, SERVE would like to thank all the educators across the six sites for their dedication to and leadership in the continuous improvement of the educational system. In particular, we appreciate their willingness to share their successes and struggles with others in the region and nation. SERVE hopes to continue its efforts to study and understand TQM implementation issues as they evolve in the Southeast.

References

Ames, R. & Ames, C. (1993). *Creating a mastery-oriented schoolwide culture: A team leadership perspective.* M. Saskin & H.J. Walberg (Eds.). In Educational Leadership and School Culture. Berkeley, CA: McCutchan Publishing Corporation.

Bond, L. (1994). Surveying the landscape of state educational assessment programs. *Edtalk.* Council for Educational Development and Research. 2000 L Street, NW, Suite 601, Washington, D.C. 20036

Bonstingl, J. (1992). *Schools of quality: An introduction to Total Quality Management in Education.* Alexandria, VA: Association for Supervision and Curriculum Development.

Frazier, A. (In Press). *Roadmap for quality transformation in education.* (Available from The North Carolina Quality Leadership Foundation, 4904 Professional Court, Suite 100, Raleigh, NC 27609)

Glickman, C. D. (1993). *Renewing America's schools: A guide for school-based action.* San Francisco: Jossey-Bass Publishers.

Hatry, H. P., Morley, E., Ashford, B., & Wyatt, T. M. (1994). *Implementing school-based management.* Washington, D. C.: The Urban Institute.

Lezotte, L.W. (1992). *Creating the total quality effective school.* Okemos, MI: Effective Schools Products, Ltd.

Maehr, M. & Buck, R. (1993). Transforming school culture. In M. Sashkin & H.J. Walberg (Eds.), *Educational Leadership and School Culture.* Berkeley, CA: McCutchan Publishing Corporation.

Mt. Edgecumbe High School, Sitka, Alaska. *Mt. Edgecumbe High School Informational Packet.* (Available from Mt. Edgecumbe High School, 1330 Seward Ave., Sitka, Alaska 99835-943)

North Carolina Department of Public Instruction. (1994). *Special Report: Site based management in North Carolina* (Contact: Myra Copenhaver) Raleigh, NC: author.

Saskin, M. & Saskin, M.G. (1993). Principals and their school cultures: Understandings from quantitative and qualitative research. In M. Sashkin & H.J. Walberg (Eds.), *Educational Leadership and School Culture.* Berkeley, CA: McCutchan Publishing Corporation.

Scholtes, P. R. (1994). *The team handbook for educators: How to use teams to improve quality.* (Available from Joiner Associates, 3800 Regent St. P.O. Box 5445 Madison, WI 53705-0445)

Shedd, J.B. & Bacharach, S.B. (1991). *Tangled Hierarchies.* San Francisco: Jossey-Bass Publishers.

Southeastern Regional Vision For Education. (1994). *Overcoming barriers to school reform in the southeast.* (U.S. Department of Education, Office of Educational Research and Improvement, Contract No. RP91002010). Tallahassee, FL: author.

Southeastern Regional Vision For Education. (1994). *A new framework for state accountability systems.* (U.S. Department of Education, Office of Educational Research and Improvement, Contract No. RP91002010). Tallahassee, FL: author.

Appendix

Descriptions of SERVE's TQM Pilot Sites

In the 1992-93 school year, four schools and two school systems were selected as SERVE-sponsored TQM pilots. Descriptions of the sites and their applications of Total Quality Management are described below. Contact persons are provided if more information is desired from any site.

Starting at the District Level

Two of the six pilot sites introduced TQM implementation through an initiative directed by the district office.

Rock Hill, South Carolina

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The impetus for the South Carolina district project started with conversations between local business leaders and the superintendent. These conversations resulted in top district leadership attending an actual Deming seminar and then visiting local industries which were implementing quality principles. SERVE identified the district as a pilot project after the superintendent and key staff had been through TQM training and after a TQM steering committee had been formed and was exploring ways to implement the quality philosophy and tools in the district. The district leadership felt that a grant from SERVE would allow them to provide the training and assistance to move TQM into some schools as potential demonstration sites for other schools. SERVE funding covered the costs of TQM consultants/trainers, release time for participating teachers, and some expenses associated with improvement projects identified for study.

The district was attracted to TQM because of the push toward site-based management and the fact that the principles of TQM seemed to offer an answer to the dilemma of how one prepares schools for site-based management (capacity building) and how one maintains a "system focus" while decentralizing decision-making. (In TQM terms, the district hoped to avoid the "suboptimization" that can result when components of a system work independently of each other without knowledge of the system.) All 20 schools in the district had school improvement teams in place prior to the initiation of TQM.

This district initially focused TQM training activity on three volunteer schools that formed a small feeder system (an elementary, middle and high school). All faculty at the three schools were given an orientation to TQM by facilitators with industry background. TQM teams from each of the three schools then received intense, ongoing training from TQM facilitator/trainers from both the corporate and educational arenas. In addition to the three school TQM teams, a cross-school team was formed to study and improve the process of transition from school to school within the feeder system. Training provided for teams was always done on a "just in time" basis so that those trained immediately had application opportunities. Facilitators were provided for each team from either the central office staff or from local industry with district office involvement to emphasize visibly district level support for the work of teams.

The "problem" selected for study and improvement by the elementary school team was the process of communication with parents about the progress and needs of children. This involved study of grading issues, reporting issues (report card formats, etc.) and especially the conferencing skills and availability of staff for parents. The middle school TQM team similarly focused on the process of two-way continuous communication with the home in order to obtain more feedback from parents and to improve the educational experience for chil-

dren. The high school team selected as a problem the number of freshman students not participating in co-curricular activities and sought to improve the processes involved in students choosing to participate, as such participation is linked to many positive statistics (reduction of dropouts, better discipline, improved academics).

This district is seeking to model empowerment of teachers by moving a process for decision making to the school and teacher level while maintaining a "system focus." With certain parameters in place teacher teams at one school have made teaching assignments, planned faculty communications including faculty meetings, and revised school discipline procedures. In addition to the training completed with the staffs of the three initial schools, all principals and district office staff have had four or more days of TQM training. The entire school staff of 1,300 have had a half day overview presentation on TQM and its importance for the district. Training for all new teams is provided on a "just in time" basis.

In addition to supporting TQM at the school level, a district-wide TQM steering team has evolved into a strategic planning team of 40 people who have developed a proposed district mission, core beliefs, and learner standards which subsequently were "ratified" by all school staffs, advisory groups, and other significant groups. Teams have been developed to focus on strategies for improvement. These district-wide teams are focusing on six major areas which include technology, school climate, safety, staff development, curriculum, and collaboration.

Johnston County, North Carolina

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This North Carolina district (27 schools) also had an interested superintendent as a precursor to receiving the SERVE grant. When this new superintendent began to serve in Johnston County in 1991, he spent three months listening to the community about the needs of the system. At a board of education retreat, he proposed that the results of this assessment pointed to the need for TQM in the district. At a subsequent board meeting in September 1991, the board adopted the superintendent's recommendation that the TQM journey begin. An outside consultant was immediately secured to begin the training for the senior leadership team, which includes the board of education, superintendent, assistant superintendents, and all school principals. The team attended a four-day Deming seminar conducted via satellite.

Beginning in November 1991, monthly training sessions were conducted with the senior leadership. The training focus was on developing an awareness and understanding of the principles of quality, the definition of quality, Deming's 14 points as related to education, the concept of continuous improvement, the use of basic quality tools, and the Plan-Do-Check-Act cycle.

After many meetings with representatives from each school, a new Johnston County Schools Mission Statement was officially adopted. It reads, "Johnston County Schools will foster a flame for learning within each child that will last a lifetime. To achieve this mission, we will continually improve our services of education and meet our community's requirement for quality."

In the summer of 1992, the school system was reorganized at the senior level with the elimination of the positions of associate superintendent, assistant superintendent, and special assistant to the superintendent. All of these positions became senior associates, thereby flattening the leadership of the organization. The Johnston County Schools Total Quality Leadership Council was formed and began meeting on a monthly basis. The group serves as an advisory group to the board of education and the superintendent.

In October of 1992, two schools, Smithfield Middle and Four Oaks Middle School were selected by the central office to begin a three-

year TQM initiative through funding by SERVE. The two principals had received a week of intense TQM training in Ohio prior to beginning this effort. The principals, in turn, presented the ideas and a plan for beginning with TQM to the faculty. The approach to the faculty was to offer everyone the opportunity to be involved in some way on teams. Cross-functional teams (consisting of staff from a variety of programs or levels) were established around existing functions. For example, at Smithfield Middle, there are seven cross-functional teams: a leadership team of teachers, secretaries, parents and the principal that implements school improvement plans and determines budget needs; a technology team that assesses equipment and training needs; a student service team that is responsible for remediation, incentive, and parent involvement programs; a communication team that looks at school communication strategies and business involvement; a school climate team that assesses student recognition programs, working conditions, and discipline issues; a curriculum and instruction team which reviews program needs and plans professional development; and an assistance/crisis intervention team which reviews information on students referred for behavior or academic problems. Faculty were encouraged to volunteer for participation on any of these teams.

To promote continuous improvement in core subjects (math, reading, writing, science, social studies), three grade level teams (one per grade) were established which meet once per day and once per week with the principal.

In the first year, the cross-functional teams met at least once a month, with the leadership or quality team meeting more often. In addition, a consultant worked with teams off-site for several days. The training primarily consisted of orientation to TQM theory and beliefs (awareness) rather than application. Thus, the principals took an active role in leading the culture building process. That is, they were the facilitators of the change. In addition to the training going on with the faculty of these two schools, the consultant met once a month with all school principals and continued to work with district-wide teams.

In 1993-94, another pilot school was added. Four Oaks Elementary School organized K-5 grade level teams, an enrichment teachers' team, a steering team comprised of all grade level chairs, and the Quality Council comprised of parents, teachers, teacher assistants, custodians, and food service representatives.

A significant aspect of the TQM process in this district has been a strong business partnership in the community, not necessarily for funding, but for facilitating meetings, talking about TQM in terms of its meaning for them, training teachers in technology on weekends, sending principals to facilitating sessions free of charge, and other kinds of support. In additional, the district has a university partnership that provided support in the form of collecting baseline survey data from every employee on their level of understanding of Quality. The university is also interested in training future teachers in the TQM concepts. Additionally, the district was selected to be one of seven demonstration sites in North Carolina for a Total Quality Education initiative sponsored by the North Carolina Business Committee for Education and the governor's office, which provided additional financial support.

The district experienced a superintendent change midway through the SERVE project. Under the new superintendent, the district entered into an agreement with Pinellas County Schools in Florida, a national leader in total quality education, to provide training and guidance to the entire school system. Because different trainers/facilitators have slightly different approaches as to what TQM means, it was decided that the leadership teams/quality councils at all schools should be trained, even those pilot schools who had previously been trained by the original consultant. All were trained by May 1995. In the summer of 1995, the three pilot schools sent a total of 50 teachers to a training session on the application of TQM to the classroom.

The district has developed several videos highlighting different aspects of their TQM implementation and a TQM training manual. Linda Stevens, the principal at Smithfield Middle School, has developed a Guide for Using Teaming in a Quality School Setting which explains some of the details of how she has made teaming work for school improvement.

Starting at the School Level

SERVE contracted with Westat, a research/consulting firm, to develop TQM training and facilitate the implementation of TQM at four school sites. The four schools that volunteered to participate had some to no previous knowledge of TQM. The schools received funding for three years to cover teacher release and travel costs associated with the implementation. The four schools met together over the three-year period and shared experiences, in meetings coordinated by Westat facilitators.

Although some argue that it is impossible for a single school to implement TQM in a "non-TQM district," an interest in TQM can originate from a school principal or leadership team (see Mt. Edgecombe High School, Sitka, Alaska). If a school experiences success with this approach, other schools in the district may become interested. The experience with the following four SERVE sites suggests that TQM can be initiated at a single school within a district under certain conditions.

Magnolia Junior High, Moss Point, Mississippi

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This Mississippi junior high school had a fairly traditional management structure at the beginning of this project. There were few operational school teams. The school leadership recognized that, like many other schools, they were struggling with issues of low test scores and lack of student interest. This realization led Magnolia's principal to search for answers in the literature, particularly in the Total Quality Management area. Thus, the principal was eager when the opportunity to participate in the SERVE project presented itself.

In fall 1992, the principal selected five teachers (leaders in their disciplines) to participate as a team. The team met for a day each month with the Westat trainers/facilitators to learn and apply TQM concepts. The team also met weekly without the facilitators to work on their chosen improvement project, the improvement of the instructional management system (IMS). The IMS had been developed in 1982 to provide direction to teachers on what to teach and to measure student mastery of specific skills and information. The system consisted of a continuum of skills and objective tests to measure mastery of each skill. Although the system had been valuable in ensuring that specific skills were taught and mastered, it did not address learning at a high level. The problem identified by the team was that purposeful, quality work by students was even discouraged because of the overabundance of information to be learned on the skills continuum and tests.

The team surveyed staff and students to better understand their perceptions about the need for curriculum change. The survey results confirmed their statement of the problem in that teachers and students agreed that the IMS should be rethought. The TQM team developed a project mission statement.

"The mission statement of this project is to foster academics and critical thinking skills by revising the instructional management system and creating a learning atmosphere where mutual respect and enjoyment exists."

The team began its work on redesigning the IMS and selected the seventh grade English skills continuum as a starting place. They worked to reduce the number of skills and make assessments more meaningful and instruction more purposeful.

In the second project year, the principalship changed hands, and as often happens, so did the

project emphasis. Since the district was soon to be engaged in a district-wide rewrite of the entire curriculum, the team decided to leave the rewrite of the IMS to this district-wide committee and refocus their efforts on introducing the entire school staff to TQM. The Westat facilitators/trainers helped the team present TQM concepts to the faculty. The faculty chose three problem areas to work on and the TQM team members functioned as group facilitators for these three study groups.

One group studied "Better Hallway and Locker Management" by observing students in the halls. A second group studied "Improving Student Responsibility for Bringing Materials to Class," by charting how and when students came to class unprepared. The third group studied "The Improvement of Student Achievement and Motivation through Peer Tutoring," and collected survey data on how students and faculty felt about this approach.

In the third project year, all three problem-solving teams are monitoring and evaluating the implementation of recommendations.

Thus, at this site, the entire faculty has had exposure to the TQM approach to managing improvement. It should also be noted, as was found at other sites, turnover in trained team members was significant. Of the six original TQM team members, only two are still at the school.

Gulf Shores Middle School, Gulf Shores, Alabama

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Until 1992, Gulf Shores had one school for grades K-8. Due to growth, a new middle school was built to serve grades 5-8. Gulf Shores Middle School opened in August 1992 with an interim administration and a staff of 18. The district selected the school to participate in the SERVE pilot partly because of this newness. At the time of the SERVE grant, the district had little experience with site-based management. The TQM team members were selected by the interim school principal and a resource teacher, who subsequently became principal. Thus, the TQM team identified to receive the Westat training consisted of the principal and three classroom teachers.

The team decided early in the first year of training by Westat facilitator/trainers to include the entire faculty in the TQM effort due to the small size of the staff. The team members put together a three hour workshop on TQM from the materials they had been studying. The faculty was divided into three teams, each with a TQM team member as a group facilitator. These new groups were asked to brainstorm areas of concern. The three areas chosen were "Classroom Interruptions," "Staff Morale," and "Teaching Techniques." The remainder of the first year was spent on facilitating the continued study of the three selected problem areas. The "Classroom Interruptions" group collected data on the amounts and kinds of interruptions that occurred in classrooms. The "Staff Morale" group collected data from teachers on concerns, and the "Teaching Techniques" group collected data from teachers on instructional methods used. These study groups did not resume their work in the second project year.

In the second year of project implementation, the focus shifted somewhat. Rather than facilitating special project teams, the TQM core team selected two areas to study: shared decision-making models and interdisciplinary curriculum. Rather than concerns or problems, these areas were seen as directions for the future. The team visited the Deer Lake TQM pilot site, described later, which had a functioning school improvement council, to elicit ideas about scheduling, organizational structure, procedures, etc., for site-based management. A site-based, decision-making model was designed and presented to the faculty. After elections were held for the school's first site council, a TQM team member trained the site council members in some group process techniques. Another TQM team member became a leader in efforts to plan and develop interdisciplinary teaching units for the school.

In the third year, one of the original three teachers on the team had left the school so the TQM team is no longer meeting as such. However, the school is actively focusing on customer satisfaction. The site council is charged with reviewing concerns submitted by any parent, student, teacher, or others. The concerns first go to an advisory board (a sub-committee of the council) which in turn determines if the concern is a schoolwide concern. If so, it is passed on to the site council for study. Thus, the site-based council has a very customer-focused mission. In fact, one of the first issues the council dealt with was the need for better communication with parents because a parent submitted a request for the council to consider initiating orientations for parents.

W. Fred Scott Elementary, Thomasville, Georgia

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W. Fred Scott Elementary initially became involved in the Southeastern Regional Vision for Education (SERVE) project when Principal Robin Gay was contacted by the State Department Regional Director. At that time, SERVE was attempting to identify schools that would be interested in a three-year project focusing on Continuous Quality Improvement. Located in Thomasville, Georgia, Scott Elementary was built in the late 1960's and presently serves 480 students from grades kindergarten through five. The student body is representative of the population of Thomasville. The faculty consists of twenty-six teachers, fourteen paraprofessionals, two secretaries, two custodians, and five food service workers.

After being selected for this opportunity, Principal Gay presented the information to the entire faculty. She asked for volunteers who would be willing to make a commitment to one Saturday a month for the next three years. Many staff members shared their interest and willingness to participate in the project. A decision was made to create a school-wide representative team which would include one teacher per grade level and one resource person. The members of the original quality management team are: Robin Gay, principal; Mary Morris, first grade; Imogene Conyers, fifth grade; Maggie Boozer, fourth grade; and Mary Friesen, resource. Staff members were made aware at the onset that as the process progressed more of the faculty would be involved. This has come to fruition as the school now has a leadership team whose goal is to make decisions concerning various operations of the school. This group is comprised of five teachers, one resource person, and one paraprofessional.

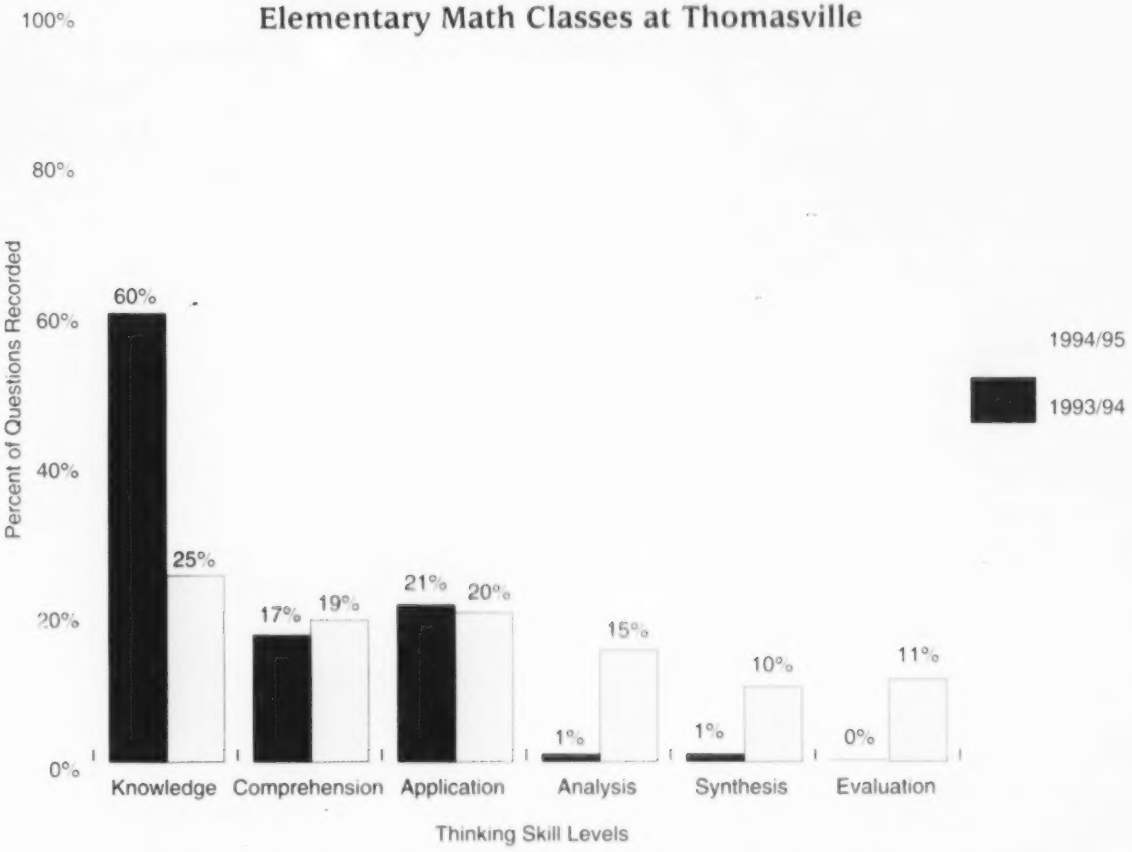
There are approximately 96 years of teaching experience among leadership team members. The group has been very fortunate in that individual members share a great many ideals concerning the education of children and share a commitment to quality education. These concerns entail making necessary changes and taking risks to improve learning.

In the first project year, the quality management team received TQM training and chose the problem area to study. The principal encouraged the team to think of themselves as a curriculum improvement team and to focus on those issues that would make a difference in classrooms and thus, impact students.

Using TQM tools in the first year to focus on elevating critical thinking skills in mathematics, the team studied teachers' use of higher-order questioning in the classroom. This study involved the entire staff because the data was collected through peer observations. A tally form using Bloom's taxonomy was developed in order to record the types and frequency of teacher questions. The study provided an opportunity for an aspect of teaching to be examined without being critical of any one individual. The data was analyzed by grade level and school level. Thus, the staff was exposed to the research aspect of TQM in a hands-on way that had meaning for them personally.

Collecting the data on an area designated as needing improvement adds an element of accountability and importance to the improve-

Table 1
Changes in Kinds of Questions Asked in Elementary Math Classes at Thomasville



Findings: Reduction in basic knowledge questions asked (60% to 25%). Increase in analysis, synthesis, and evaluation questions asked.

ment endeavor. In this case, the data collected demonstrates the success of the effort to improve questioning skills.

It should also be noted that the whole staff received a variety of training to support the goal of increased use of higher-order questioning. Much of this training was organized and provided by TQM team members.

Scott Elementary has used TQM as a means to move from traditional, top-down structure to collaborative decision making with emphasis on teaming. Prior to the SERVE grant, the principal functioned as primary decision maker. At the end of the first year, a school leadership team was established in order to move to a more collaborative form of decision making. This team has representatives from all grade levels and special areas. Their various responsibilities include the review of school operations and governing issues. In addition to the TQM team and the leadership team, grade level teams work to carry out established goals. The entire school faculty is involved in continuous improvement.

In the second year of the project, the TQM team began to look at the math curriculum, realizing that types of questions asked by teachers in their classrooms were a function of types of curriculum materials used. They decided to pilot a new textbook. The results from this pilot were successful and, in the third year, the new textbook was fully implemented. Peer observations continue to be utilized in order to monitor the level of questioning by teachers.

At the end of the second year, the team became concerned about improving Social Studies test scores. The team reviewed the Georgia Quality Core Curriculum (QCC) objectives in Social Studies and discovered that many teachers were unfamiliar with some of the objectives. Ongoing research is being conducted on the relationship between teacher ratings of the objectives and student test scores.

Under the supervision of David Bayless (Bayless and Associates), the TQM team is working collaboratively with the Georgia State Department of Education in order to provide information regarding the alignment of the current Social Studies curriculum with the required Curriculum Based Assessment (CBA).

As an outgrowth of the Social Studies alignment project, the TQM team and the faculty became interested in pursuing alternative assessment strategies that could prove more effective than the current methods. In order to change to authentic assessment, Scott Elementary needs to find a process that takes into consideration the individuality of the students, the change in direction of educational goals, alignment of curriculum with assessment and, in turn, the continuous improvement of teaching strategies and instruction.

A goal-oriented school improvement plan was developed and implemented at the beginning of the third year of the project. Because of the study of TQM and a reorganization in the school to site-based management, the school was able to establish realistic and measurable goals.

Future plans include further training in the philosophy and use of TQM for staff members and parents. Participants in this training will make up a quality team in order to identify additional issues which may need further study. Students will be involved in goal setting and evaluation of quality work through the implementation of a pilot study of portfolios and alternative assessment.

TQM team members plan to research the subject of low achieving students in order to better meet their educational needs. Developmentally appropriate activities, teaching strategies, learning styles, and parental involvement will be areas of focus. The goal will be to increase the team's knowledge about under-achieving students so that appropriate steps may be taken to meet the needs of all students by modifying the instructional program.

Deer Lake Middle School, Tallahassee, Florida

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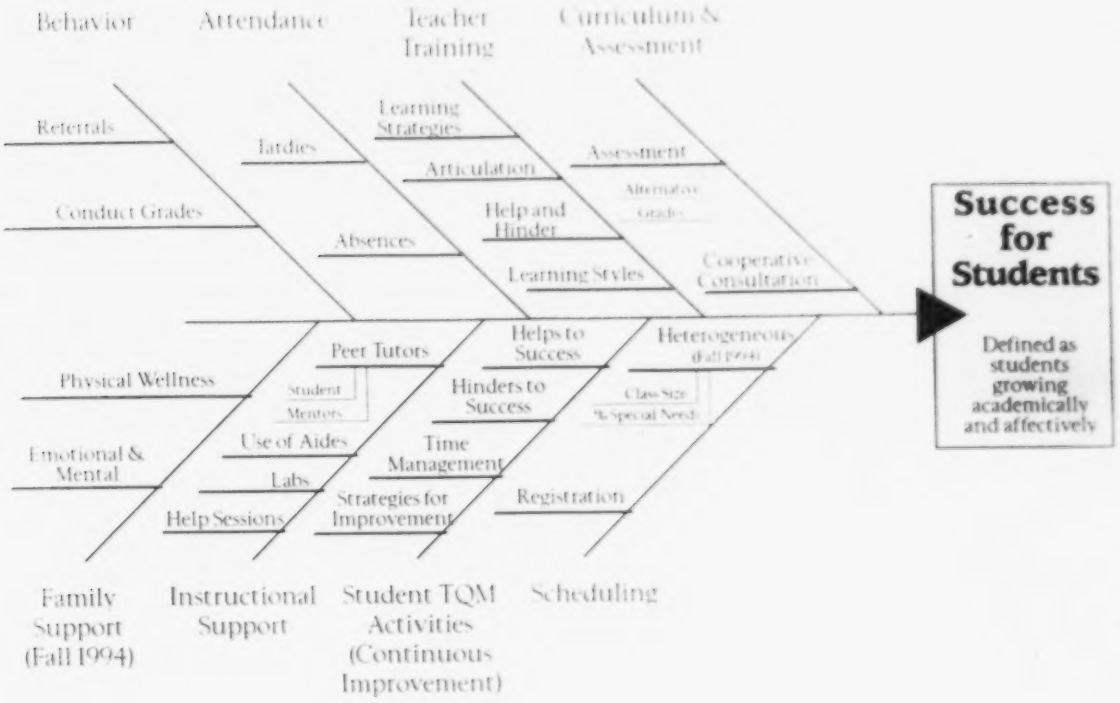
This middle school, unlike the three previous schools, had a functioning school improvement team and school improvement goals in place prior to the project. However, after being selected as a SERVE pilot site, the principal selected a TQM team, which was different from the School Advisory Committee for School Improvement/Site Council (a group of administrators, teachers, parents, and students). The TQM team consisted of a group of lead teachers from each grade level, a guidance counselor, and the principal.

During the fall of 1992-93, (the initial year of the school's involvement in TQM), Deer Lake's stated mission was "to develop appreciation and respect for each individual and to prepare every student to be a responsible and successful member of our world." The agreed upon focus of the TQM project was to support those students currently not achieving success. As a result of data collected through formal and informal surveys, and after much discussion, team members decided to concentrate their

TQM Team's Analysis of Factors Affecting Student Success



work on the delivery of services to students identified as "learning disabled" (LD) by Florida's Exceptional Student Education (ESE) guidelines.

In 1991-92, the year prior to the project, Deer Lake's Content Mastery Lab had been designed to provide the least restrictive environment for LD students by allowing them to be mainstreamed (to receive instruction in regular classes) in all of their academic courses, while providing out-of-class assistance from an ESE instructor. Even though the Content Mastery Lab offered support for LD students, existing data on these students' success in the classroom suggested that the delivery of services could be improved. The TQM team decided to apply TQM to revise the delivery system and ensure the success of the "mainstreamed" students.

In the second project year, the TQM team held a four-day, pre-school workshop to train additional faculty members in the quality approach and the use of TQM tools. Findings from the 1992-93 analysis of data on students identified as LD were shared with the group. Using input received, the TQM team was able to chart the elements necessary to ensure the success of students, using a cause-effect diagram shown above. (A cause-effect diagram allows you to map out factors thought to affect a problem or desired outcome. It is an effective TQM tool for brainstorming, discussing, and organizing possible causes in a structured way.)

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In addition, during the second year, the TQM team continued to collect data and monitor the achievement of LD students and expanded its focus to collect data on the academic progress of identified at-risk students in grades six, seven, and eight. The school's at-risk resource teacher and the computer resource specialist joined the team in order to provide additional assistance in data collection and analysis. At the same time, three members of the original team elected to leave the team due to time demands. This suggests that it is important to be clear up front about the time and energy that will be involved in team participation. During this year, the team discussed the data and identified several concerns. Teachers of "regular" classes were unable to meet the wide range of special needs of the LD and at-risk students in their classes. Additionally, minority students were underrepresented in "advanced" classes. These findings led the team to recommend to the school's Site Council an institutional change for the third year (1994-95): the elimination of "tracking" of students such that language arts, social studies, and science classes would be heterogeneously grouped in grade six. The Site Council agreed and plans to implement the change were designed.

At the beginning of the 1994-95 school year (third project year), the returning TQM team consisted of the dean of curriculum, a guidance counselor, a language arts teacher, the Exceptional Student Education (ESE) coordinator, and the at-risk coordinator. Two sixth grade teachers were added to the team. There was a principal change during the summer of 1994, so a newly appointed principal also represented a new addition to the team.

Throughout the year, the TQM team explored implementation issues related to the sixth grade heterogeneously grouped classes, collecting teacher and student survey data and analyzing enrollments and grade and test data. One finding was that the number of students needing special help in each class was more manageable with the change and that behavior problems in classrooms were reduced. They found that developing the necessary variety of teaching techniques and activities required a great amount of time and that classes did not end up grouped according to the suggested formula (60% advanced, 30% regular, and 10% special needs). They also found that out-of-class support was necessary for the success of special needs students and that 60% of the students in grade six who were unsuccessful academically received no out-of-class support. The TQM team presented their data to a meeting of sixth and seventh grade teachers. As a result, teachers on seventh grade teams decided to implement heterogeneous grouping during the 1995-96 school year.

Thus, this third project year was a busy one with the team experiencing success in writing a plan for the implementation of the sixth grade heterogeneous project, collecting data on implementation, and presenting the findings to teachers.

In the spring of 1995, the TQM team began work on an evaluation that would bring their three-year project efforts together under the heading of increasing student opportunities to learn and to be successful. The Westat facilitators were instrumental in helping them conceptualize this evaluation report.

The most significant perceived impact of participating in the SERVE TQM project was the growth in teacher understanding of the need to base decisions on data rather than intuition and the need to continuously monitor programs and strategies. Because the TQM team was formed and supported with grant funds and operated as a "special project" team in the school, it is not known what impact the ending of the grant will have on its continuity.

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